STUDY OF THE OPERATIONS OF THE UNITED STATES COAST GUARD

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STUDY OF THE OPERATIONS OF THE UNITED STATES COAST GUARD

TUESDAY, MARCH 22, 1955

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D. C.

The committee met at 10 a. m., pursuant to notice, in room 219, Old House Office Building, Hon. Herbert C. Bonner (chairman) presiding.

The CHAIRMAN. The committee will come to order.

We are pleased to have with us this morning Vice Adm. A. C. Richmond, Commandant of the United States Coast Guard. The Chair regrets that the House meets today at 11 o'clock, so we will not have as much time as we had anticipated. Should it be necessary, the hearings will continue through Friday.

Admiral Richmond?

STATEMENT OF VICE ADM. ALFRED C. RICHMOND, COMMANDANT, UNITED STATES COAST GUARD

Admiral RICHMOND. Mr. Chairman and gentlemen, I am Alfred C. Richmond, Vice Admiral, United States Coast Guard, Commandant.

I welcome this opportunity to appear before the Committee on Merchant Marine and Fisheries of the House of Representatives for the purpose of discussing an organization in which we have a mutual interest and concern, the United States Coast Guard. While I suppose this meeting might technically be called a briefing, I would rather regard it as a seminar or a symposium, since I feel that the Coast Guard can derive great benefits from a discussion of this nature. Certainly, the comments and suggestions which you gentlemen may make during the course of this meeting will be as helpful to us as I hope our information will be to you.

SCOPE OF REMARKS

In preparing for this discussion, I visualized that you would be primarily interested in obtaining answers to specific questions that you may have concerning the Coast Guard. Accordingly, I will confine my opening remarks to a brief general coverage of the Coast Guard in order to provide a starting point for a more detailed discussion of specific matters of immediate interest to you. At the conclusion of this statement, we on the Coast Guard side of the table shall be most happy to answer any questions or give you any additional information which may be desired.

Moreover, I will try to avoid giving you a cut and dried dissertation on the trials and tribulations of the service by touching on each separ-

ate matter but briefly in order to give you the best complete picture of the Coast Guard in a reasonably short time. I will use statistics only to the extent necessary in order to best illustrate important points.

Also, at the expense of being considered somewhat immodest, I will assume that each of you has a fairly good general knowledge of our service, and, accordingly, I will concentrate on the lesser known but equally important aspects of our daily activities. While we in the Coast Guard are always gratified with the excellent press coverage of our assistance and rescue efforts, we feel that our less-publicized jobs such as port security, loran, ocean stations, marine inspection, and the like, make an equal contribution to the overall public service role in which we take natural pride.

Along with a general picture of the going Coast Guard, I should like to touch briefly on one or two of the major problems which presently confront us, and make brief reference to the legislative program which we are submitting to this session of the Congress. Finally, I would like to take a very brief look into the future, to the extent that the future may affect the service.

Before proceeding further, gentlemen, I will introduce the members of my staff who are with me today. These officers represent a cross section of our top administrative, technical and operational staff; each has had considerable service and experience in the Coast Guard, and I am sure each is quite capable of answering your later questions in his respective field. First I have with me Admiral Hirshfield, who is the Assistant Commandant of the Coast Guard; also Admiral Perkins, who is Chief of the Office of Operations, and with him, his assistant, the Assistant Chief of the Office of Operations, Captain Evans; also, Captain Hogan, who is Chief of the Port Security and Law Enforcement Division, and Captain Linholm, who is Chief of the Aviation Division, all under Operations. I further have Captain Stephens here who is assisting me in the presentation. Also I have Captain Hesford, who as some of you know, is Liaison Officer, and our Public Information Officer, Captain Peterson. In addition, tomorrow and Friday I will have other officers; Admiral Cowart, who is our Engineer in Chief, Admiral Shepheard, Chief of our Office of Merchant Marine Safety; and others who I will introduce when they appear to represent their specific divisions.

GENERAL BACKGROUND OF THE COAST GUARD, HISTORICAL

While in the true traditional manner I could trace the history of the Service back to the founding days of 1790, I shall instead confine myself to only those organizational developments which have occurred during the past 40 years, since these latter years have best produced the Coast Guard as we know it today. Moreover, this most recent period best exemplifies the integration into one agency of several activities of Government with a common primary concern, in this case safety of life and property at sea.

The Coast Guard under its present name came into being in 1915 with the merger of the old Revenue Cutter Service and the former Lifesaving Service. This stage of our development brought together what might be termed the Nation's seagoing and shoreside assistance agencies.

Then, in 1939, the former Lighthouse Service was transferred from the Department of Commerce and integrated with the Coast Guard.

This was another step in bringing under one roof the Federal agencies concerned with maritime safety.

Early in World War II, the former Bureau of Marine Inspection and Navigation of the Department of Commerce was transferred to the jurisdiction of the Coast Guard on a temporary basis. While this shift was intially prompted by the war situation, the transfer was made permanent in 1946 in recognition of the desirability of bringing into the Coast Guard still another Federal body concerned with marine safety.

We in the Coast Guard feel that these developments have logically followed each other in the evident interest of obtaining a unified effort in this important field of Federal public service and of promoting efficiency and effectiveness in the overall Federal operation. The merging of these agencies with their areas of common interest has permitted the Coast Guard to secure a nice blending of the closely associated activities which go to make up the maritime safety functions.

FUNCTIONS

While the maritime safety function comprises one of our most important fields of responsibility, our other duties are equally important and of similar value to the well-being and progress of the Nation.

The several duties of the Coast Guard may be grouped in a number of different ways; however, it is perhaps best for the purposes of this discussion to quote directly from basic law in the matter, significantly since title 14, United States Code, section 2 entitled "Primary Duties" specifies our total major responsibilities in one fairly short paragraph:

> The Coast Guard shall enforce or assist in the enforcement of all applicable Federal laws upon the high seas and waters subject to the jurisdiction of the United States; shall administer laws and promulgate and enforce regulations for the promotion of safety of life and property on the high seas and on waters subject to the jurisdiction of the United States covering all matters not specifically delegated by law to some other executive department; shall develop, establish, maintain, and operate, with due regard to the requirements of national defense, aids to maritime navigation, icebreaking facilities, and rescue facilities for the promotion of safety on and over the high seas and waters subject to the jurisdiction of the United States; and shall maintain a state of readiness to function as a specialized service in the Navy in time of war.

We may further reduce this concise mandate given us by the Congress to a very general and broad statement of responsibilities as follows: Maritime safety, maritime law enforcement, and military readiness.

I believe that a more detailed understanding of Coast Guard functions and duties will evolve from later portions of this statement.

ORGANIZATION

Having touched briefly upon our responsibilities under the law, it is well to consider next the manner in which the Coast Guard is organized to carry out its obligations.

In terms of the place of the service in the overall structure of the Federal Government, I'm sure all of you know that the Coast Guard is, by law, constituted as a military service and a branch of the Armed Forces of the United States.

It is by virtue of this provision that the service normally performs its duty as an agency of the Treasury Department, but upon declaration of war, or when the President directs, is transferred to and becomes a specialized service under the Navy. Once the period of the particular emergency is ended, the Coast Guard resumes its normal place in the Treasury Department. Emergency transfers of this nature made under the law, such as those occasioned by World War II, are effected with a minimum of disturbance largely because of the close continuing relationship maintained with the Navy.

Many aspects of our normal peacetime activities are necessarily and desirably parallel to Navy routines and procedures in keeping with the "military readiness" obligation imposed upon the Coast Guard by law. We take natural pride in the fact that the Coast Guard has served with the Navy in every war in the country's history, and, in the eyes of the Navy, with efficiency and with credit.

This continuing relationship with the Navy is evidenced to a large extent in our internal organization. The total geographical area of operations of the Coast Guard, both at home and overseas, is divided into Coast Guard districts. In most cases, these geographical divisions exactly or closely parallel the boundaries of the several Naval districts. Provisions are made for prompt and exact realinement with the Navy when the circumstances require.

Altogether, the Coast Guard has 12 such "districts," 10 within the continental United States, and the other 2 comprising the Alaskan area and the Hawaiian and Western Pacific area, respectively.

Our district headquarters are located in the large port cities which are the natural centers for Coast Guard operations; Boston, New York, Norfolk, Miami, New Orleans, Cleveland, St. Louis, Long Beach, San Francisco, Seattle, Juneau, and Honolulu. The district commander in each instance is the direct representative of the Commandant and is immediately responsible for the effectiveness and efficiency of Coast Guard operations and administration within his particular area. Generally, each such district commander has cognizance of and is directly concerned with all of the separate functions of the Service. However, a particular district headquarters may be especially well prepared to cope with problems unusual to the area by virtue of geographical circumstances. For example: Our 2d district with headquarters in St. Louis is primarily concerned with aids to navigation and marine inspection on the inland rivers, and with rendering assistance during floods on those rivers; the 9th district with headquarters in Cleveland is faced with the somewhat different Coast Guard problems peculiar to the Great Lakes. Our 17th district with its district office in Juneau is concerned with operational problems arising from the still different circumstances and conditions of Alaska.

The whole of the Coast Guard operation is, of course, generally directed and supervised from our headquarters here in Washington. Over a period of years we feel that we have developed a pattern of organization well-fitted to our special problems and equipped to carry out the Coast Guard job in the most effective manner. Our basic staff organization here at our main headquarters has been developed so as to insure maximum coordinated effort and advice in administering the service. The responsibility for broad operational guidance is vested in our Office of Operations and the Office of Merchant Marine Safety while the general logistics of the Coast Guard are served by

the Office of Engineering and the Office of Personnel. The Office of the Comptroller is the component which handles our financial, fiscal, and supply logistics.

Throughout the whole of our internal organization, we feel that we have achieved a nice balance between central direction and authority and delegated local control.

FACILITIES

By virtue of the very nature of the duties of the Coast Guard and the need for us to provide public service in a great many locations, we are an organization of small units. Altogether, the Coast Guard has over 1,700 such units or facilities located in probably 1,000 different places.

About 1,250 of these facilities are shore units consisting of bases, depots, lifeboat stations, light stations, marine inspection offices, loran stations, air stations, radio stations, and the like.

We operate a fleet of over 120 aircraft of different types and for different purposes; long-range and medium-range seaplanes, amphibians and land planes, and some 30 helicopters. Our floating fleet comprises about 350 vessels of all types; some 30 large cutters; over 100 buoy tenders; ice breakers; tugs; and a wide variety of smaller craft of the patrol-boat type.

You will note that these are all manned vessels. In addition to that we have a large number of smaller boats, assigned to lifeboat stations, on vessels, and at light stations, numbering in the neighborhood of about 1,500 powered boats and about 1,700 pulling boats, nonpowered boats. These facilities are the tools of our trade. They are the means whereby we are able to carry out the numerous and varied jobs we have to do throughout the whole of our area of responsibility. Through a continuing close study of changing local conditions, we are able to leep these facilities disposed in such a manner as to render maximum service with, in our opinion, maximum efficiency and economy.

It is well to emphasize that the great majority of these facilities are manned with very few personnel. An average district in the Coast Guard will include about 100 to 150 such facilities. In a typical district, over 40 percent of these units will have less than 10 personnel. This circumstance of many small commands in many locations requires that we entrust much command responsibility to our enlisted petty officers. We pride ourselves that these men have always carried out their duty in a most commendable fashion.

MANPOWER

The most important tool of any organization is, of course, its manpower. The manpower of the Coast Guard presently totals about 33,000 people, consisting of approximately 27,900 military personnel and about 5,100 civilian personnel. The military force is made up of roughly 24,000 enlisted personnel, about 2,600 commissioned officers, about 900 warrant officers, and some 400 cadets.

The civilian force includes some 2,000 classified employees and about 2,400 wage board employees; the small remainder represents certain classes of special field employees; lightkeepers, light attendants, et cetera.

Much of the administration of our military personnel, pay, rating and rank structure, distribution, procurement, and the like, is fixed by law, and in many particulars we parallel the Navy in these respects. This similarity has developed over a period of many years and is, of course, of great advantage during those emergency periods when we serve under the Navy.

Represented in our present military force is a substantial number of personnel who were transferred from other Government agencies in connection with the integration actions to which I have previously referred. These personnel have adapted themselves to the concepts of the Coast Guard in a most commendable fashion in a relatively short period of time.

Closely associated with the standing manpower of the Coast Guard is our Reserve. It is significant to note that we had no Reserve prior to World War II, but that in our tremendous expansion during the war to a level of about 172,000 personnel, we developed a very healthy respect and admiration for our original Reserve force. Since the war we have been gradually developing the Reserve in consonance with our requirements and today our total Reserve strength, including our Women's Reserve, the SPARS, consists of about 3,000 officers and 17,000 enlisted reservists. Of these totals, about 1,200 officers and 5,200 enlisted personnel are participating reservists, while about 1,850 officers and 12,000 enlisted personnel are classified as nonparticipating.

That is to say that in the event of an emergency, the only people that we could call on for immediate service, without any additional training, would be those shown in the solid segments of the circle shown on the chart. Those nonparticipating would undoubtedly have to receive varying amounts of training before they could be placed on active duty. Of course, the blank spaces represent the mobilization strength up to 6 months that would have to be not only trained but acquired as well.

MONEY

Passing from the subject of manpower, I should like next to describe the Coast Guard dollarwise. For this purpose, we may consider the Service first in terms of the total investment in its physical plant, and, secondly, in terms of the annual cost.

The physical plant of the Service represents a total investment of about $1.3 billion, on a present-value basis. This total plant investment is made up as follows: The floating plant, $825 million; the shore plant, $350 million; aircraft, $70 million; electronics, $60 million.

I would like to emphasize to the committee at this point that this is an estimate, pure and simple, because, of course, any time you take service material and try to assign a present value, you are in a rather nebulous field. We estimate, however, that on a replacement cost basis, the total investment in the property of the Coast Guard is about $2 billion.

In terms of annual operating costs, the Coast Guard presently requires about $200 million a year to carry out its responsibilities. In our budget request for fiscal year 1956 now pending before Congress, the appropriation headings and amounts comprising this total sum are as follows: Operating expenses, $154 million; Retired pay, $21 million; Acquisition, construction, and improvement, $7 million; Reserve training, $3 million.

An additional $16 million goes to the operation of the ocean station program carried out by the Coast Guard for the Department of Defense on a reimbursable basis.

ACTIVITIES, GENERAL

I have previously indicated that the total duties and responsibilities of the Coast Guard may be broadly included under the three general headings of: "Maritime safety," "Maritime law enforcement," and "Military readiness."

I should like now to outline these duties in a little more detail, particularly insofar as they are reflected in our present day-to-day activities.

MARITIME SAFETY

The broad classification, Maritime safety, includes the separately identified jobs of marine inspection, aids to navigation, and assistance, or search and rescue. To best illustrate the distinct character of each of these separate tasks and at the same time demonstrate their close relationship, we might consider briefly the case of a mythical ship, from her cradle to her near grave.

While the ship is still on the drafting table, the Coast Guard is concerned with many of her construction details. Our technical people review and must approve all plans for the ship to insure that she will be built in accordance with established marine safety standards. This review extends to a close study of the plans for the hull itself, the vessel's machinery and mechanical equipment, and all wiring and electrical installations. Once approved for construction and during the building stage, the Coast Guard conducts inspections at the shipyard and the factories where certain of the materials and equipment which will go into the ship are being manufactured. Rigid specifications and standards have been developed for marine safety items such as life-preserving and fire-fighting equipment.

Once construction has been completed and the vessel is being readied for regular service, the maritime safety role of the Coast Guard is further evidenced in our licensing and certificating responsibilities. In the interest of assuring that the ship will be manned by qualified and competent personnel, the Coast Guard issues licenses or certificates, as appropriate, to only those mariners who have demonstrated satisfactorily their proficiency to sail the ships of our merchant marine. In addition to these checks on the capabilities of the individual, the Coast Guard further promotes the cause of maritime safety by conducting periodic emergency drills abroad ship to test the proficiency of the ship's crew working as a team in combating and coping with such things as fire, explosion, collision, and abandon ship.

Having satisfactorily met these initial safety requirements, all of which come under the general heading of our marine inspection function, the ship is ready to proceed to sea.

To assist her out of harbor and on her voyage, is the aids-to-navigation system maintained and operated by the Coast Guard. On soundings, she will utilize the buoys, the lighthouses, and the lightships found in and about all of our ports. Once on the high seas and bound for her destination, the ship may further rely upon the long-

range types of aids to navigation operated by the Coast Guard, such as loran and radio beacons.

The foregoing described functions of the Coast Guard, marine inspection and aids to navigation, may be viewed as preventative safety measures. Should the ship, in spite of these preventative measures or from unusual causes find herself in distress by reason of fire, collision, foundering, stranding, et cetera, the coordinated search and rescue effort of the Coast Guard then comes into play.

From our strategically located rescue coordination centers, Coast Guard ships, lifeboat stations, and aircraft will be promptly directed to provide assistance, along with any other facilities which may be near the scene, to assist in fighting a shipboard fire, to take off the passengers and crew, or to take the vessel in tow, as may be dictated by the circumstances and urgency of the situation.

All of these, then, marine inspection, aids to navigation and search and rescue, are the round-the-clock manifestations of the Coast Guard's maritime safety effort. Moreover, maritime safety is very much a year-round matter, too, with periodic reinspections, drydock inspections, and other special inspections aimed at maintaining the safest possible merchant marine.

MARITIME LAW ENFORCEMENT

Generally speaking, the Coast Guard is the principal maritime law enforcement agency of the Federal Government with a broad responsibility for enforcing or assisting in the enforcement of all applicable Federal laws upon the high seas and waters subject to the jurisdiction of the United States.

Implicit in this responsibility is the authority to board, search, and seize any vessel subject to the jurisdiction, or to the operation of any law of the United States anywhere within such waters. This law-enforcement responsibility encompasses such activities as protecting the customs revenues of the United States, preventing ships from illegally entering or clearing our ports, and the boarding of motorboats to insure compliance with the various motorboat laws.

In the spotlight at present in the law enforcement field is our port security program. This program, conducted under Executive Order 10173, which invoked the provisions of the Magnuson Act and charged the Coast Guard with the protection of vessels and waterfront facilities, has been limited to: Protecting specified categories of vessels and waterfront facilities in major port areas of the United States; controlling the entry of certain vessels into major port areas; screening of merchant seamen sailing on United States vessels, and of waterfront workers; and supervising the loading of explosives and other hazardous cargoes, and the issuing of permits therefor.

The port-security program as we know it today came into being in 1950 as a result of the Korean outbreak. Circumstances were such that we never did build up a really sizable force employed in port security; moreover, since the Korean incident has tapered off, the program has been progressively reduced. Certain aspects of port security are presently receiving more emphasis than others in terms of the reduced emphasis on the total program.

MILITARY ROLE

I have previously indicated that along with carrying out our normal peacetime functions, we are, by law, charged with maintaining a state of military readiness for potential duty under the Navy. Most of our peacetime activity in this connection is directed at keeping abreast of current Navy practices and doctrine, participating with the Navy in various types of fleet maneuvers, and scheduling our ships and military personnel in different types of Navy training courses, both ashore and afloat.

Moreover, our ships and aircraft are kept fairly up-to-date in terms of Naval wartime equipment, such as radar, sonar, ordnance, et cetera. It is important to emphasize that our military readiness program is well integrated with our normal peacetime duties and in no case do we have people or facilities engaging solely in military readiness.

MISCELLANEOUS DUTIES

In addition to the well-defined major jobs of the Coast Guard which I have briefly outlined, we have a rather wide variety of lesser and miscellaneous duties. While these latter are comparatively minor in scope, they are equally important as responsibilities and are firmly integrated in the overall scheme of our operation.

First among these is our ocean-station responsibility. We presently are operating 6 ocean stations, 4 in the Atlantic and 2 in the Pacific.

An ocean station is actually a pinpoint location in the ocean which is manned continuously by our ships. We have 18 ships allocated to this program, maintaining the 6 stations on a 21-day rotation schedule. These ships serve as weather observation points, and provide search and rescue services and communications and air navigational facilities. The ocean-station program was established to meet the requirements of World War II, and has been in continuous operation ever since. The background of this program is rather complex and I will be most happy to develop it further should you so desire.

At this point, however, I will but briefly note that the program stems from international agreements with certain of the European countries and with Canada. The Coast Guard is presently operating the ocean-station program for the Department of Defense on a reimbursable basis.

Another duty of the Coast Guard which evolves from an international agreement is the International Ice Patrol. This activity involves the use of Coast Guard ships and aircraft in the North Atlantic, generally in the area of Greenland and the Grand Banks. The patrol came into being after the Titantic disaster of 1912, and is designed to prevent the recurrence of such a tragedy by maintaining a close surveillance on icebergs during the winter and spring months of each year. Constant and timely observation of ice conditions during critical periods make possible a system of early warning to shipping in the area.

The Bering Sea patrol is noteworthy since it involves a variety of miscellaneous and disassociated duties. Each year a ship of the Coast Guard spends several months in the Bering Sea and the Alaskan Arctic generally, for the purposes of: protecting life and property;

protecting the Alaskan seal herds and other wildlife; law enforcement; transporting a floating court for the administration of justice; furnishing medical and dental assistance to natives; providing logistics support to our own stations in Alaska; and doing other odd jobs for various agencies of the Federal Government.

The Coast Guard has been carrying out the Bering Sea patrol for many years, and it is unquestionably a most effective way of providing the essential services of Government to a fairly isolated and little-traveled region.

Next, a brief mention of our loran activity. Properly, loran is a part of the aids to navigation system of the Coast Guard, but because of the far-flung nature of loran and the unusual circumstances attendant to its use, it is well to consider it separately. The word "loran" stands for "long range aid to navigation," and, as implied by its name, is a long-range navigational device which utilizes electronics. Loran enables aircraft and ships to determine their positions quite accurately at distances of up to 700 miles in daylight hours and about 1,400 miles during darkness. The Coast Guard presently operates about 40 loran stations, located along the coasts of the United States, in Greenland, in Alaska, in Hawaii, in the Western Pacific, in the Philippines, in Japan, and in Korea. We feel that loran is one of the most important electronic developments of World War II which has been put to excellent peacetime use.

Another of our minor and lesser-known duties is that of icebreaking. This, of course, is a seasonal and largely a regional job, and, accordingly, we do not maintain any fleet solely for this purpose. Even our larger types icebreakers of the so-called Wind class are called upon for other duties of the Coast Guard. Generally, however, the three vessels of this type engage in Arctic or Antarctic operations with the Navy each year, and I'm sure the value of these operations is readily evident.

We generally think of icebreaking, rather, as a duty carried on here at home, on the Great Lakes, on our rivers, and in our harbors. We operate one specially built vessel, the *Mackinaw*, on the Great Lakes and, in terms of contribution to the economy and security of the Nation, this ship has probably paid her way many times over. The *Mackinaw* most years is instrumental in opening Great Lakes navigation early and keeping it open until late in the season. This type of icebreaker is of evident importance, since as you all know the Great Lakes provide the water route for our huge ore carriers which ply between the ore ports of Minnesota and the steel ports of Gary, Cleveland, et cetera.

Additionally, many of our smaller vessels, tenders and tugs particularly, have an icebreaking capability, and hardly a winter passes but that these vessels are breaking open a river or a port or freeing icebound ships. Very recently and close to Washington, we were called upon to free icebound traffic in the Chesapeake Bay, and not too many winters ago, the Coast Guard conducted icebreaking operations on the Potomac right here in Washington in order to keep a necessary supply of fuel oil flowing into this area by water.

In closing this brief outline of our present-day activities, I would like to give you a very few significant statistics, which, I think, best tell the story of just what we do. In a typical year, 1954, the people and facilities of the Coast Guard: answered 19,500 calls for assistance;

saved 3,500 lives from extreme peril; assisted one-third billion dollars in shipping; towed 8,000 craft of all types to safety; transmitted 60,000 weather reports from its ocean stations; made 40,000 radio contacts with transoceanic aircraft from these stations; operated 38,500 aids to navigation; conducted annual inspections, drydock examinations, and reinspections on some 15,500 vessels, aggregating about 50 million tons of shipping; issued 80,000 mariners' documents of all kinds; reviewed 12,000 separate plans for merchant vessels; investigated 2,000 marine casualties; boarded 72,000 vessels and motorboats; reported on 16,000 violations of Federal laws of all types.

In carrying out this total job, the aircraft of the Coast Guard flew over 5 million miles on assigned missions, and the ships of the service patrolled in excess of 3 million miles.

In some years, the workload is even greater. For example, this present winter has been most severe on the North Atlantic. I am sure you will recall from reading your daily papers not more than a month or two ago that every ship on the Atlantic seemed to be in trouble at the same time. During the particularly stormy period of January 15 through 26 alone, the Coast Guard participated in some 8 fairly major distress incidents, about simultaneously. One of these was particularly interesting, not only because of the case itself but also because of the rather unusual aftermath. On the 26th of January, our cutter the *Coos Bay* picked up safely 8 persons who were aboard a MATS C–54 aircraft which was forced to ditch in the North Atlantic. Since the *Coos Bay* was, at the time, occupying ocean station ECHO, the survivors were transferred to another Coast Guard cutter, the *Duane*, in order that the *Coos Bay* could resume her important ocean station duties. The *Duane* was just returning to Bermuda from several prior assistance cases, and with the aircraft survivors safely aboard, resumed her journey to that port.

However, before she could reach Bermuda she was again diverted on still another distress mission, and it was several days before she finally reached port. Only the fact that she was running short on fuel, restricted her efforts in the last case; otherwise the original aircraft survivors may have enjoyed an even longer free ocean journey than I'm sure they ever bargained for.

I might mention to the committee, and you might be interested to know, in that particular case, from the time the MATS plane hit the water until the men on it were aboard ship was 24 minutes, which was a fine example of cooperation between the plane crew in their ditching and our getting a boat over and having a boat standing by and getting them back to the ship. If you have to ditch in the ocean, that is a nice way to do it, to get aboard a ship in short order.

MAJOR PROBLEMS

I would like to touch very briefly upon the general matter of Coast Guard problems. As might be expected, our problems can be quite easily classified under the broad headings of: Men, Materiel, and Money. In this respect, our problems are not unique, nor are they completely unsolvable. Needless to say, however, they do provide us with a continuing challenge. I do not propose to burden you with any lengthy discourse on our problems at this stage. I would, however, like to illustrate my remarks with two specific examples; first, a significant problem in regard to personnel.

In common with the other Armed Forces, the Coast Guard is presently faced with the matter of abnormal personnel turnover, and has been, generally, since World War II. Briefly stated, it has been increasingly difficult to get men into the service and it is probably more difficult to keep them in. The resultant excessive turnover of our military force is certainly not conducive to best efficiency. I feel that there are a number of understandable reasons for this condition, and each of these is truly a natural sign of the times.

First off, I believe that as a corollary of any form or degree of compulsory military service such as is presently required in this country, we must expect a lessening of individual desire to voluntarily seek and make a military career. It is not easy to convince any young man today that a voluntary military career is really a good thing, when at the same time at least a degree of involuntary military service is required to meet the existing situation. Consequently, no military service can expect to enjoy the considerable advantages of the 1930's when the vast majority of the military force were truly long-term career men, or "plankowners", as we called them.

Moreover, whenever times are good on the outside, there is a natural tendency for the military man to leave the service after a few short years to seek the greener pastures of outside employment. This tendency has increased since in the eyes of many of our people the gap between the attractiveness of an outside job and the relative unattractiveness of a military career seems to be progressively widening.

A marked example of this abnormal personnel turnover may be found in our military rating of electronic technician. These are the personnel responsible for keeping the vast electronics machinery of the Coast Guard; radio, sonar, radar, loran, and the like, in operating condition. As you all know, there were great advances in the field of electronics during World War II. Many of these technical developments from the war years have found widespread application in our peacetime living since the war. The Coast Guard itself is making much good use of modern electronics, aboard our ships, in our aircraft, at our loran stations.

This vastly expanded usage of electronics has set up a concurrent requirement for more and better trained technicians. We have had to resort to complex and lengthy training courses for our electronic technicians, and many man-hours and dollars are involved in producing a competent trained man in this rating. It is to our advantage, therefore, to hold on to the technicians we train in order to realize on our investment.

But, to the same degree that our utilization of modern electronics has greatly expanded since the war, so has grown the electronics industry producing this complex equipment. More and more skilled technicians are required by this industry: for design, for engineering, for production. Then, too, for example, the more television sets produced by the industry, the greater the demand for television repairmen to keep the sets operating. Obviously, then, there is a most fertile field on the outside for military personnel trained as electronic technicians. And it is to these outside jobs that many of our men turn: to the higher salaries, the better working conditions, and the greater chances for advancement in outside industry. This steady stream of trained people out of the service simply means that we must obtain

new men, train them, and go through the entire process on a continuing basis.

Secondly, I should like to make brief reference to our broad materiel problem.

I have previously indicated in these remarks that the total investment in the physical property of the Coast Guard is substantial, in the neighborhood of $2 billion in terms of replacement costs. Obviously, a physical plant of this size necessarily requires a considerable annual expenditure for plant replacement, if any semblance of a planned, orderly replacement program is to be achieved. Even if we accept that the normal service life of the entire composite Coast Guard plant—floating units, shore units, aircraft, and electronics—is as great as 50 years, there is thereby established an annual plant replacement requirement of about 2 percent, or roughly $40 million yearly.

Unfortunately, our appropriations for acquisition, construction, and improvements have been far below this required level, and, consequently, Coast Guard property is deteriorating on much too wide and too rapid a scale.

Moreover, our inability to pursue an orderly replacement program has forced us to divert our already limited maintenance funds for substitute purposes of keeping the physical plant patched up on a makeshift basis. This creates a serious drain on our maintenance money and results in lowering the level of our normal continuing maintenance program below acceptable standards.

We are greatly concerned with both of these aspects of the materiel problem, especially since we know from long experience that the level of our total operational efficiency is so directly dependent upon the state and condition of the physical facilities we use to carry out our total job. The representatives of our engineering staff are prepared to develop this matter in greater detail.

Fortunately, not all of our problems are so serious nor of such a continuing nature. Many, rather, are comparatively simple one-shot affairs which can be solved in our routine day-to-day administrative processes. Others can be solved only by remedial legislation, and it is to this general subject I will next turn.

LEGISLATIVE PROGRAM

Since this committee functions as the legislative committee for the Coast Guard on the House side, I feel it is appropriate for me to outline briefly our legislative program for the present session of the Congress.

Altogether we have about 20 separate proposals in this program, of which about half have already been submitted to Congress. The remainder are presently under review and clearance in the Bureau of the Budget, or are in the final stages of development in the Coast Guard or the Treasury Department.

Several of these proposals pertain to recommended modifications in the statutes covering our marine inspection function. A second group deals with military personnel matters, while certain others pertain to miscellaneous subjects such as aids to navigation and Coast Guard contracts. These proposals will, of course, come under close study by this committee at the proper time. Meanwhile, it may be interesting to you if I make brief reference to certain of the more

important of these measures designed to improve our overall effectiveness and efficiency.

S. 743 would amend the revised statutes to authorize biennial inspection of the hulls and boilers of cargo vessels, in lieu of the annual inspection now required. In this case, the Coast Guard feels that the standards established by the several world classification societies have so improved the general construction features of merchant vessels that the annual inspection required by existing Federal statute may be changed to a requirement for biennial inspection without jeopardizing the safety of such vessels. Moreover, the proposed modification in the inspection requirements for vessels would afford the Coast Guard opportunity to utilize more effectively its present personnel in other fields of marine inspection, such as in supervision of loadlines, in more frequent reinspections and shipyard inspections, in more complete drydock examinations, and in more stringent enforcement of the law requiring monthly sanitary examinations of crews quarters on American vessels.

Another pending proposal would amend the vessel inspection laws so as to require inspection of certain classes of motorboats now exempt. We feel that enactment of this proposal would strengthen considerably the safety aspect of our marine inspection activity.

S. 460 would authorize the gradual substitution of life preservers for wooden floats aboard river steamers. Here, again, increased maritime safety is the objective.

In respect to personnel, we have several proposals which would enable us to afford more equitable treatment to our military personnel generally. One such proposal now under final study would give our enlisted personnel parity with the Navy in regards to early discharges under certain conditions without prejudice of rights, privileges, or benefits. This authority would also be most helpful to the Coast Guard itself since it would enable us to smooth out the peaks and valleys in personnel procurement presently resulting from a fluctuating discharge rate.

Another proposal relating to personnel would afford fairer consideration to our Women's Reserve by granting constructive service to members of that component to cover the 2-year period, 1947–49, when the Coast Guard was without statutory authority for a Women's Reserve. This measure would be directly beneficial to those of our women reservists who had at least 1 year's active service prior to 1947, who were separated under honorable conditions, and who have again held membership in the Reserve since 1949.

Still another personnel measure would authorize schooling for dependent children of Coast Guard military personnel stationed in certain areas outside the United States. In this case, permanent authority is desired in lieu of the interim authority which has been included in annual appropriation acts for a number of years.

Pending in the Bureau of the Budget is an important proposal designed to induce a proper flow of promotion in the officer ranks of the Coast Guard by providing a reasonable and continuing system of forced attrition of officers in the top grades of captain and rear admiral. We feel that this legislation is essential if we are to avoid a most serious condition of stagnation in our officer ranks.

Lastly, S–459 would transfer to the Panama Canal Company certain Coast Guard aids to navigation located in the approaches to

the Canal. This transfer would be effected without an exchange of funds and would result in a direct savings to the Government by eliminating the need for Coast Guard operation and maintenance of these few aids located at a considerable distance from our nearest normal base of operations.

A LOOK INTO THE FUTURE

In order to round out this brief picture of the Coast Guard, it is well to take a very quick look into the future through the eyes of the service. While we do not profess to be crystal-ball gazers, there are certian indications which we feel are rather significant as regards the potential trends in our total workload.

First, in terms of our normal and usual peacetime activities, it seems clear to us that the unceasing demand for the public services required by law to be provided by the Coast Guard will almost certainly increase rather than stabilize or lessen. The causes which generate this demand are numerous. Shipbuilding and water-borne commerce seem to be on the upswing, transoceanic air travel over both oceans is definitely a rapidly growing thing, we are doing more commercial fishing in this country, and more of our people are buying pleasure craft, increasing our clientele of amateur mariners. I'm sure statistics would even prove that more and more ardent sportsmen in the Great Lakes area are taking up the sometimes precarious sport of ice fishing, increasing our customer potential for that account. Moreover, entirely new forms of maritime undertakings, such as the offshore oil-drilling operations in the Gulf of Mexico, definitely add to our maritime safety activities, requiring expanded effort on our part in marine inspection, in aids to navigation, and in search and rescue.

This chart shows some of the increases since 1940. You will notice that practically everything we have listed here has made a tremendous upswing.

I would also like to point out that the chart, for example, does not give any indication of the great increase in small boats not numbered, such as boats propelled by outboard motors, or small sailing craft, of which there has been a tremendous increase and which are very definitely a part of our search and rescue or assistance problem at the present time.

Each of these rather disassociated upsurges in our national activity gives definite signs of a growing potential workload for the Coast Guard, and points to an increasing requirement for more personnel, more ships, and more aircraft to properly and effectively carry out our total responsibilities. Only the future can fix the ultimate scope of this added workload.

Secondly, we must view the future in terms of the international situation. We in the Coast Guard have come to learn that even a continuing unrest in international relations can have a direct and immediate effect upon our daily activities.

The Korean affair is the most recent example of this impact. At no stage during the Korean incident did the Coast Guard, per se, engage in the fighting in a strict sense. We were not transferred to the Navy, and, from all outward indications, merely continued our normal peacetime jobs under the Treasury Department. Yet, in several separate

instances the Coast Guard gave direct support to the Korean operation. We operated ocean stations in the Pacific on the air routes supporting Korea; we built and operated loran stations in the Far East close to the scene of hostilities in support of Korean air operations; we "beefed up" the military strength of our ships to forlay against any untoward turn of events; and, here at home, we established our port-security program as a primary deterrent to forces inimical to the United States.

To the extent that this condition of relative insecurity persists in world affairs, we in the Coast Guard must be prepared to intensify our contribution to the security and welfare of the country.

Gentlemen, this concludes my brief remarks on the state of the Coast Guard. I hope that I have been able to give you a fairly rounded and concise picture of the service and have added somewhat to your previous knowledge of what the Coast Guard is and what we do.

We had at this point intended to show you a movie which, although outdated somewhat—it was made in 1947—nevertheless is sufficiently current that it does not detract from the basic story of the Coast Guard. However, the movie will take about 30 minutes. The actual showing time is 20 some minutes. It is now 10 minutes to 11. I am either prepared to answer questions and put the movie over until tomorrow, or we can go ahead with it.

The CHAIRMAN. Admiral, I, as chairman of the committee, am very much interested in your service. It is not the desire of the Chair to hurry over the hearing with your agency.

For the benefit of the members of the committee, the first order of business on the floor today will be H. R. 170. It is the sale of rubber plants. There will be 6 hours of general debate. Unless we have a quorum call, I intend to carry on with the hearing here. That is, without any objection from a member of the committee. The committee does not have the privilege to meet during the session of the House, but, nevertheless, this is not a legislative hearing. It is a hearing of the type that I do not think there will be any objection to members sitting here and listening to a review of the Coast Guard activities.

Mr. MILLER. I will have to be on the floor.

Mr. SEELY-BROWN. Would it be possible for those of us who have to go to the floor this morning, at least for the start of this bill, to ask maybe two or three quick questions of the Admiral before the movie is put on?

The CHAIRMAN. It is my intention, now, to subject you, Admiral, to questions.

Admiral RICHMOND. I will be happy to try and answer them.

The CHAIRMAN. I would like to have you tell us what function the Coast Guard has in reviewing plans for merchant vessels. I take it those are plans for construction of merchant vessels?

Admiral RICHMOND. That is right. Safety aspects, generally, as I indicated in my statement, wiring and general plans, to see that the vessels meet the safety requirements established by law and regulation. I would suggest that Admiral Shepheard will appear here and he will be very glad to go into specific detail. We will also have, if you desire, Captain Murphy, who is the naval architect in charge of the division that does the reviewing.

The CHAIRMAN. All right. Now, about the turnover of personnel, is that going to be in other discussions?

Admiral RICHMOND. I can make a general statement on it now. Admiral Kenner, the personnel officer, will be here to discuss those matters.

The CHAIRMAN. I believe that would be very interesting to members of this committee.

Admiral RICHMOND. As I indicate in my statement, we have a very serious problem. I don't want to give the idea to the committee that we are alone. All the Armed Forces have identically the same problem. In fact, take the reenlistment rate. It is surprising how close the percentage of the reenlistment rate gibes between the various services. Of course, as this committee knows, all of our personnel are obtained by the voluntary method. That is, we do not take anybody from selective service. In the Regular Service, the enlistment is 4 years. We do call to active duty young men who have enlisted in the Coast Guard Reserve. They have a 2-year active duty period. But at the present time, just for general information which might be of interest to the committee, there has been no great increase in first enlistment reenlistment. During the last 6 months there has been a slight increase in second- and third-term enlistments over what it was, we will say, last summer, so that our general reenlistment rate is slightly higher today than it was 6 months ago.

The CHAIRMAN. About the picture, I want all of these gentlemen to have a chance to ask you questions. I probably might defer this picture until the questions are answered. Since Mr. Miller and Mr. Seely-Brown indicate that they want to be on the floor immediately, I will yield to Mr. Miller at the present time.

Mr. MILLER. Admiral, we recently passed the Armed Services Incentive Pay Act, which affects the Coast Guard. We were told that that was designed to correct some of these conditions. Do you anticipate that it will help out in your personnel problem?

Admiral RICHMOND. I think it will help a great deal; yes, sir. I can't at this stage of the game estimate how much, because I do not think that the loss of personnel today is entirely a matter of monetary return. There are other factors. I think it is the general opinion of the people of the country, quite truthfully, as I said in my statement, that military service is not attractive, by and large, to a lot of people in the United States today.

Mr. MILLER. Has not a lot of that come about by taking away some of the fringe benefits that you had?

Admiral RICHMOND. That is my opinion; yes, sir. I believe it has.

Mr. MILLER. What effect have the rather strained conditions under which the Coast Guard has to operate with respect to hospitalization and particularly dependent's hospitalization had upon your problem?

Admiral RICHMOND. With respect to the question of dependent's hospitalization, sir, there are undoubtedly cases where people have left the service because they felt that they were not getting the same as members of other armed services were.

But I would say that is only one of the factors. I do not think you can isolate this and put it down to any one thing.

Mr. MILLER. I did not mean to do that. I was simply trying to get some information on it, and I was wondering if something like

that is not an important factor which lends itself to, as we used to say, a lot of guardhouse talk in the Army.

The CHAIRMAN. Have you finished, Mr. Miller?

Mr. MILLER. We can take that up with your personnel people.

Admiral RICHMOND. I think this probably will be helpful to you. Since you have raised the question, I am trying to put my hands on a copy of a letter that I had.

Mr. MILLER. Admiral, without going into that detail, let me ask you this: Have you done everything in your power, administratively, to correct these irritating things that contribute to low enlistments, such as loss of fringe benefits?

Admiral RICHMOND. We feel that we have taken every step practicable. We have attempted to improve the conditions at our units to the means feasible to us, particularly on the isolated stations. We avail ourselves of the movies; we try to set up a logistics service so that they get their mail regularly; those things that are definitely geared to making life on an isolated station as happy as it can be. As a matter of fact, Admiral Hirshfield and I last year made a complete swing of the Alaskan and Pacific loran stations, recognizing those problems, and devoted most of our time to that particular morale problem in looking over the stations. That is, we left the technical checking to the other members of our group.

Mr. MILLER. The people who man these stations, particularly the loran stations, have to be technically trained and have a high degree of training and intelligence, do they not?

Admiral RICHMOND. That is correct, sir.

Mr. MILLER. They are a little bit different from the old sailor, who in past generations, could light the wick of the lighthouse lamp and continue to live as a hermit, and who thought nothing of it. The type of men today that you have to have in loran and some of your other stations are the type of men whose very background and education make them seek or want to seek the company of their fellows and they are not the hermit type.

Admiral RICHMOND. That is correct, sir.

The CHAIRMAN. Mr. Seely-Brown?

Mr. SEELY-BROWN. The first two questions I had have been somewhat covered by the questions of Mr. Miller. We both have a very real interest in the problems that you have already brought to our attention. I think it would be important for the record that the military pay bill which we passed in the House the other day does include all Coast Guard military personnel, does it not?

Admiral RICHMOND. Yes.

Mr. SEELY-BROWN. No. 2, could you tell us what the real effect of the recent appropriation would be as regards the air activity and the air facilities under the control of the Coast Guard. Will that improve that situation?

Admiral RICHMOND. Yes, sir. Slightly over $6 million goes for aircraft and spare parts. However, because of the type of aircraft that we are presently purchasing, that is only three aircraft. It will improve, answering your question. It will not answer it in its entirety, by any means, our problem.

Mr. SEELY-BROWN. Could you tell me, sir, if any capital improvements are planned at the Coast Guard Academy?

Admiral RICHMOND. There is nothing in there for any capital improvements, to my recollection, sir. I would have to refer to it.

You see, that leaves a little less than a million dollars or approximately a million dollars for capital improvements for all other phases of the Coast Guard, of which about $400,000 goes to aids to navigation, not specific projects but just changes in aids to navigation brought about by improvements in the waterways with the Army engineers, and replacing aids that have been damaged, and that sort of thing. So, really, there is only about a half million dollars for capital.

Mr. SEELY-BROWN. Do you know if there is any attempt being made by the Coast Guard to acquire additional land at the Coast Guard Academy for the activities there?

Admiral RICHMOND. There is an attempt, sir, to get additional land or have it donated by the city of New London, part of what I have always known as Riverside Park. At the present time there are no plans to utilize that property for any increased activity. It is mainly to remove an eyesore there because the city is using that land as a dump. That is the immediate objective. Eventually, sometime in the future, presumably that land would be available.

Mr. SEELY-BROWN. I have one last question. As you described your legislative program, I did not recall your having expressly stated your interest in the legislation which had been introduced earlier, regarding the medical care for dependents of the Coast Guard. Does that mean any change in the attitude of the Coast Guard regarding that legislation?

Admiral RICHMOND. No, sir. The reason it was not included in here was because I only indicated that legislation which we had definitely sponsored ourselves. I did not mean to infer that there was any lack of interest in either your bill or the bill that came from the other side.

Mr. SEELY-BROWN. Thank you.

The CHAIRMAN. At this point, we will recess the hearing, Admiral, and continue with you at 10 o'clock tomorrow morning, continuing the hearing to Friday. Will that suit your convenicnce?

Admiral RICHMOND. If it is permissible with the chairman, I suggest we set the movie up and show the movie first, and then I will be available to answer all the questions that the committee has. Then we will move to Admiral Perkins, after the committee finishes with me.

The CHAIRMAN. Very well.

We will now recess, and resume tomorrow morning at 10 o'clock.

(Whereupon, at 11:10 a. m. the hearing was recessed, to reconvene at 10 a. m. Wednesday, March 23, 1955.)

STUDY OF THE OPERATIONS OF THE UNITED STATES COAST GUARD

WEDNESDAY, MARCH 23, 1955

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D. C.

The committee met at 10 a. m., pursuant to notice, in room 219, Old House Office Building, Hon. Herbert C. Bonner (chairman), presiding.

The CHAIRMAN. The committee will come to order.

I will say for the information of the committee and the witnesses today that we have permission to sit during the time the House is in general debate. So we will go through until 12 o'clock. The House goes into session again at 11 o'clock this morning.

The first witness will be the Commandant of the Coast Guard.

STATEMENT OF VICE ADM. ALFRED C. RICHMOND, COMMANDANT, UNITED STATES COAST GUARD—Resumed

Admiral RICHMOND. Mr. Chairman, as you will recall yesterday when I finished my statement, I indicated that we had this movie that takes about 30 minutes which, although somewhat dated, it was made in 1947, still gives a fairly representative review of the various Coast Guard activities which I tried to describe to the committee in brief yesterday. With the committee's permission, we would like to go ahead with it, after which I will be available to continue answering questions of the committee.

The CHAIRMAN. Very well.

(At this point, the committee was shown a movie entitled "The Active Peacetime Service.")

The CHAIRMAN. I thank you very much, in behalf of the committee, for the showing of the picture, Admiral. I am sure those of us who are here appreciated it and enjoyed it.

Admiral RICHMOND. Thank you, Mr. Chairman.

The CHAIRMAN. Are there any questions?

Mr. Allen?

Mr. ALLEN. Mr. Chairman, first, I am impressed with the statement that Admiral Richmond made as to the amount of authority that is given to the various elements of decentralization. I would like to say, Mr. Chairman, that my observation has been that it really works out. I think I have had more local cooperation from the Coast Guard when I have come in contact with various elements than with almost any other branch of the service.

Admiral, I compliment you on that.

The second thing that has puzzled me a little bit, and this is not a criticism or suggestion, but asking for information, is that it has seemed to me that almost all of your activities over the period of years have tended to be away from the original revenue cutter service and toward safety at sea, and services of that type at sea, and more connected with the Department of Commerce than with the Treasury in peacetime. I am wondering if that is true. Do you have more relationships with other departments than with your own?

Admiral RICHMOND. No, I do not believe that is entirely correct, Mr. Allen. Of course, the Coast Guard being a service agency, is very hard to locate in any one department with a firm argument that that is the department that it ought to be in.

A number of years ago, when Admiral Waesche was Commandant, he appeared, I believe, before this same committee, and at that time prepared a statement which was printed. It is known as Document No. 88, I believe, which traces the history of the Coast Guard. It is a very excellent statement, although slightly dated now, of the evolution of the Coast Guard from the four services that I indicated yesterday. It is true that over the last few years, as far as prevention of smuggling, which was the basic concept of the Coast Guard, that there has been less of that than in earlier days. We do not have as much of that work. We still work very closely with customs, another Treasury agency, in such things as the port security program, and we work very closely with the Alcohol Tax Unit in the Treasury. So as a practical matter, I do not think we are any more closely allied to Commerce than we are to the Treasury activities.

Mr. ALLEN. I think it would follow, then, that in your opinion it is as well or a better place in the Treasury than it would be in any other department of the Government?

Admiral RICHMOND. I believe so, sir. This is only an opinion, but I have always had this opinion, that if this Nation ever develops a department of transportation, then possibly the Coast Guard might better be in such an agency. There have been a number of suggestions, for example, that we ought to be transferred or take a place in the Department of Defense permanently. I think that would defeat many of the purposes of the Coast Guard. I think we are logically placed in the Treasury Department. There is also the fact that you have the continuity, the history of having been in the Treasury Department. I see no reason for a transfer to any other department at the present time.

Mr. ALLEN. I know the picture of the old scene of the Coast Guard cutter coming alongside an arriving ship with a boarding party, and noticed the remark that the Immigration and the other services came along at the same time. I do not think it has always been true, in my experience, that they all come at the same time. That prompts this inquiry. I think I have noticed that the various services, Quarantine and others, do come at different times in some ports, and that a great variety of information is taken on forms which each department develops for its own use, a large part of the information being duplicated on the several forms, and the work of the personnel on the ship increased rather extensively.

Is there any attempt that you know of on the part of the Government to coordinate the services, and particularly coordinate the taking of information so as to eliminate either the duplication or the

delay that is occasioned to ships arriving possibly at odd hours, sometimes?

Admiral RICHMOND. I do not believe there is any direct effort to, you might say, have a composite form, which would gather all of the information. Obviously, the boarding by each agency is for different purposes. Generally speaking, as far as the boarding of the Coast Guard, prior to the advent or the reinauguration of the port security program, we were largely in this position, that we boarded mainly for mechant marine disciplinary cases. We had no forms to be made out. We provided the transportation for Customs, of course, and Public Health Service, Quarantine, and the Immigration people. I know that in New York it is a combined boarding, and I think at all major ports it is. There may be some minor ports where the procedures have not been perfected, and you may have overlapping boardings by the other agencies. But, certainly, in New York I know it is a composite party that goes out. But as far as the forms are concerned, I think each has to serve a particular purpose, and I do not believe that there has been any move to make it, as you say, into one composite form.

Mr. ALLEN. One of the reasons I asked the question was that I think at the Port of New York there was a sufficient delay on time of ships arriving, that an effort was made to get some composite procedures. I have heard that as much as 3 or 4 million dollars a year saving in vessel delay had been accomplished. I was wondering whether any program like that had been taken to other ports.

On the contrary, going into Panama, I made it a point to collect all the forms brought aboard, and I had quite a sheaf of them. The first 10 questions on each were almost the same, identification of the vessel, and so forth. That prompted the other questions.

Admiral RICHMOND. I could not answer that specifically.

Mr. ALLEN. Thank you.

The CHAIRMAN. Any further questions?

If not, thank you very much, Admiral. Who is your next witness?

Admiral RICHMOND. We will have Admiral Perkins, who is the Chief of the Office of Operations.

STATEMENT OF REAR ADM. HENRY C. PERKINS, CHIEF, OFFICE OF OPERATIONS, UNITED STATES COAST GUARD ACCOMPANIED BY CAPT. STEPHEN H. EVANS, ASSISTANT CHIEF

Admiral PERKINS. I am Henry C. Perkins, Chief of the Office of Operations.

With the movie and also the Commandant's remarks, he has covered any of the functions which break down into maritime safety, maritime law enforcement, and military readiness. In view of that, I will mention the functions, but will not go into detail on all of them.

The aids to navigation, lighthouses, radio beacons, buoys and so forth, were pretty well covered by the Commandant and the movie. I am showing you a chart which will show entering a harbor, with the radio beacon, the lighthouse, the lightship, and the various buoys. The lighthouse tender and the buoy tender are represented there by the vessels. I would like to go into a little on loran, as the movie was not up to date.

The purpose of the loran program is to provide long-range electronic navigational fixing coverage as required by the marine and air com-

merce of the United States, and the Armed Forces of the United States.

In providing loran fixing coverage, essentially three phases are involved: Suitable sites must be located, surveyed and acquired; adequate buildings must be erected for the installation of the equipment, storage of supplies and parts, and a comfortable billeting of personnel; antennas and ground systems must be installed and connected, personnel must be assigned, equipment tested and loran charts provided.

After determining that a navigational fixing coverage is required in an area in accordance with the basic authority, the Coast Guard must carefully study the area for specific site locations that will enable at least a master station and two slave stations to be located in a manner that will furnish the desired coverage. Site surveys of these specific locations are then made with meticulous care to determine if the selected site can meet the rigid electronic propagation requirements as well as other requirements.

Once the site selections are final, construction of the stations may proceed. The stations are designed by Coast Guard civil and electronic engineers, with an efficient economical operation as a goal. Basic electronic equipment as well as dozens of everyday items must be procured, tested, accepted, packaged, transported and installed. The stations are sometimes constructed by commercial concerns, but in many cases this is not possible. In these cases, other military services or the Coast Guard itself handles this phase.

During this period the Hydrographic Office of the Navy prepares and distributes charts and tables. Personnel are trained and moved to the site. With the completion of the construction, electronic tests are commenced with the master station and slave stations participating. When the tests are successfully completed, regular operation commences. The Coast Guard operates a total of 48 loran stations throughout the world, providing electronic navigational fixing coverage for Western Europe, across the North Atlantic, North America and most of the North Pacific to the east coast of Korea.

In operating and maintaining these widely spaced operations, many logistic problems are involved. These small units, usually 11 to 14 men, are frequently located in an area far from regularly traveled supply routes. Many of them are extremely isolated. Supply and resupply, repair and replacement, reconstruction and maintenance and relief of personnel must be economically effected.

The Coast Guard uses its vessels and aircraft for this purpose as well as those of the Armed Forces and commercial concerns. I would like to have Capt. S. H. Evans, my assistant, show you the various locations of the loran stations.

Captain EVANS. Well, gentlemen, if you were on a ship or an airplane with loran receiving equipment on board in any one of these dark grey or dark pink areas, you would be able to fix your position instantaneously within less than a mile tolerance or error any time during the day or night, with a 24-hour coverage. If you were in a light grey or light pink area you would be able to accomplish the same during nighttime only within a tolerance of something under 2 miles. The difference is that during 24 hours of the day we get complete coverage of these dark areas, but due to atmospheric and electronic conditions you cannot cover all the areas beyond about

700 miles from the transmitting stations. But you can get instantaneous fixes within very, very close tolerances in these areas as noted.

Admiral PERKINS. There are 48 of these stations. Eight of them are on the east coast of the United States, 3 in the Bahama Islands, 4 on the west coast of the United States, 4 on the Hawaiian Islands, 6 in the Alaskan area, 7 in the Caroline Islands area, 6 in the Philippine Island area, 8 in the Japanese Islands area, and 2 in Greenland.

The next function I would like to go into is the ocean station program. The basic authority for this program is contained in title 14 United States Code, section 90. It states, in part, "The Coast Guard is authorized to operate ocean stations for the purpose——"

Mr. TOLLEFSON. I wonder if I could ask a question before you get off the loran subject. Do other nations have those stations?

Captain EVANS. These green stations, sir, are foreign stations. they are all Western bloc nations. Denmark operates this one [indicating]. The Canadians operate these; Iceland operates one here; England, and I think Denmark operate these others [indicating].

Mr. TOLLEFSON. Are foreign ships permitted to use our stations? How does that work?

Admiral RICHMOND. Anyone who has the loran receiving equipment on board, and it is not classified any longer so any one can purchase it, can use this service; yes, sir.

Mr. TOLLEFSON. What happens during a war period?

Admiral RICHMOND. There is a means of denying the use of loran to people that you don't want to have use it. That is classified.

Admiral PERKINS. You can shift the timing device by a code, as long as the proper people have the code.

Mr. TOLLEFSON. Thank you.

Mr. CEDERBERG. I note that part of your coverage does go into China and into the Russian area. Can they pick that up and determine the number of ship movements, the volume, and so forth, going on?

Admiral RICHMOND. No, sir. This loran operation is solely between the using vessel and the station. The station sends out a signal and if you have a receiver, you can receive it. It is just like you receive the news on your own radio. No one knows whether you are using it or not.

Mr. CEDERBERG. Can they get receivers that can receive loran?

Admiral RICHMOND. Yes.

Mr. CEDERBERG. In other words, if they had receivers, they could determine then the volume of business being done between a loran station and the number of ships? Is that possible?

Admiral PERKINS. They send out a signal. Anybody can listen to it, but nobody knows how many are listening to it. The station sends out a continuous signal.

Mr. CEDERBERG. It is continuous?

Admiral PERKINS. Yes. The old-fashioned radio direction finder that came out in World War I, there you would call the station and you send out various MO's, and they gave you a bearing from the shoreside. This is not that at all. This is a continuous electronic beat going out.

Mr. CEDERBERG. How many people do you have on a loran station?

Admiral PERKINS. Eleven to fourteen.

Mr. CEDERBERG. It takes that many people to man the station?

Admiral PERKINS. You have to have somebody sitting by the scope to see that the slave station is in time with the other one at all times.

Mr. CEDERBERG. That is all.

The CHAIRMAN. Any further question?

Mr. ASHLEY. Are all of our merchant ships equipped with equipment to receive loran?

Admiral PERKINS. I would say the vast majority are.

Admiral RICHMOND. I would say only a fair amount of merchant shipping. Actually, loran is utilized more by aircraft than it is by vessels. I would say at the present time, the last figures I saw, there are probably around two to three hundred merchant vessels. There is one phase of loran that the committee might be interested in, and that is that the fishing industry has taken it up. A great many trawlers are now equipping for this for two reasons. One is it lets them fix their position with a great deal of accuracy, and, furthermore, it is very valuable in running into port. It is just like running down a road and not losing a great deal of time getting to market. Of course time in getting to market with a load of fish is the difference between making a profit and losing it.

Mr. ASHLEY. All military aircraft, I suppose, are equipped with this?

Admiral RICHMOND. Practically all.

Mr. ASHLEY. And commercial aircraft, transatlantic?

Admiral RICHMOND. All transport craft, military transport, aircraft.

Mr. MILLER. Is it a safe assumption that all passenger-carrying vessels have this?

Admiral RICHMOND. I am sorry, sir; I cannot answer that. We had a report out a year ago that listed all the lines that carried it. I think most of the passenger lines now carry it. The loran receiving equipment is relatively inexpensive at the present time, and it is just an additional navigational aid.

Mr. MILLER. Is there any way that you have of checking on the number of vessels and aircraft that actually make use of this equipment?

Admiral RICHMOND. Only by survey.

Mr. MILLER. And that is conducted how often?

Admiral RICHMOND. Periodically, each year or year and a half, something like that. We try to get reports from the various companies as to the use of loran, as to how much they are using it.

Mr. MILLER. Does that determine your plans as far as the expansion of loran and the amount of money requested for this service?

Admiral RICHMOND. No, sir. There is a basic overall top secret plan based on military requirements. Actually, all of the stations shown here were put in based on military requirements. Of course, those military requirements may have passed now and the stations are being continued on the basis of civil needs. But none of these stations have been installed purely on civilian requirements.

The CHAIRMAN. Is that all?

Mr. MILLER. Yes, sir.

The CHAIRMAN. Mr. Allen?

Mr. ALLEN. Can you tell us if there are any other similar systems that are competitive in nature or whether loran is ultimately a worldwide system?

Admiral RICHMOND. There are a number of systems, some in the development stage, some already in existence, that are competitive.

Loran, of course, was, as we indicated, developed during the war for military purposes. The Air Force is presently working on a system which they hope will be the eventual system to end all systems. My own feeling is, sir, that the perfect system never has been and never will be developed. There are limitations on this system. For example, we show here, and this is slightly erroneous, coverage over these land areas. This is medium frequency loran and medium frequency is, as a practical matter, of little value over land areas. The British have a system known as console, which the proponents feel would do everything that loran does.

Let's put it this way: It would give all that is needed for civil use. It has definite limitations from the military use. It has, from an air standpoint, one advantage. It can be received over any normal receiving equipment, whereas with loran you do need a special receiver, and, of course, when you get into aircraft you get into how much equipment you can carry.

In other words, if you add on 100 pounds, that is 100 pounds of passenger weight or freight weight that you cannot carry. So it is a rather controversial field as to the desirability. You can get an argument any time you want one on aid-to-navigation systems, depending on who is proposing what system. But the fact does remain that the United States Government does have a sizable investment. It is a workable system. It is being utilized at the present time, and it has been adopted by the Air Coordinating Committee as an interim system, interim meaning it is the long-range system as far as the United States is concerned until a better one is developed.

Mr. ALLEN. Would you have an opinion now as to whether we ought to expand it at considerable expense, or go easy and wait for the development before a further capital outlay would be made?

Admiral RICHMOND. As I say, sir, all the stations that have been put in have been put in on a military plan that has been developed by the Joint Chiefs of Staff, and there have been no developments for enlargement of the system for civil use. So if I gave an opinion, sir, I would be giving an opinion over the Joint Chiefs of Staff.

Mr. ALLEN. Thank you.

The CHAIRMAN. Any further questions on this subject?

You may proceed, Admiral.

Mr. BOYKIN. I might ask one question. If the English have one that is better than this, could we get it?

Admiral RICHMOND. Yes. But I do not think it is any better. I don't think the console is any better, sir. I didn't mean to infer that. As a matter of fact, the English are operating this loran station shown, and one up in the Faroes.

Mr. BOYKIN. We are working together closely?

Admiral RICHMOND. Yes, sir. We are tied in with the British on this long range.

Mr. MILLER. Can we pick up their system on our ships?

Admiral RICHMOND. Their console system? The British have, I think, only four console stations. Yes, any of our ships or planes can use the console. The console system is essentially a directional system. It does not meet the requirements that we have for military uses. That is, in our opinion. I would say it depends on who is arguing. There is another system known as Decca, which, for short ranges, probably gives equal or better accuracy than loran. But it would be a medium range rather than a long range system.

The CHAIRMAN. You may proceed.

Admiral PERKINS. Now, I will go into the ocean stations.

Mr. MILLER. Admiral, you speak of slave stations. I have a vague idea of what you mean, but could you elucidate that for a minute?

Admiral RICHMOND. Perhaps I could do it best by explaining loran. Actually, loran is a system based on the measurement of time differences between two simultaneously emitted radio signals. To put it another way, if I was here and Admiral Perkins was on the other side, and we both spoke at the same time, and you were directly in the middle, since sound travels at a definite rate, if you were exactly in the middle, you would hear both of us at the same time.

Similarly, there is a line and you could be any place on that line and as long as you could hear us, you would hear us at the same time. If you are closer to one or the other, then, in effect, you get a hyperbolic system. If this one side represents myself, then some place on this line you would hear me slightly sooner than you would hear Admiral Perkins from the other side. All we do is to use an electric signal sent out simultaneously, so that you have a master station, as we call it, a slave station. They both go at the same time. Actually, they are keyed off by a set difference, but that is the whole principle of loran.

Actually, you would only know that you are on this line some place. By taking another transmitting station also going simultaneously, we get another line. So what we do is to have what we call a double master and 2 slaves, or perhaps a double slave and 2 masters, and with your time-measuring instrument on your ship or your plane you measure those two time differences and establish your position.

The CHAIRMAN. Any further questions?

If not, you may proceed.

Admiral PERKINS. At the present time there are 12 ocean stations. The North Atlantic network, under the auspices of ICAO, contains 9 stations, and the Pacific network, which is maintained by the United States, contains 3 stations. Four stations in the Atlantic and two stations in the Pacific are United States manned.

By bilateral agreement, the Canadian Government operates one Pacific station in return for which the United States has assumed Canada's ICAO responsibility for one-third of one station in the Atlantic.

In 1953, the Air Coordinating Committee determined that the civil-aviation justification for this program was inadequate. The Joint Chiefs of Staff, however, determined that the continued operation of the network of stations described was a military requirement. As a result, the Coast Guard continues to operate it, being reimbursed by the Department of Defense.

In discharging our responsibility, we use full-time 18 major cutters. However, to get a better distribution of duties and in the interest of efficiency, this operation is integrated with the overall operation of the Coast Guard so that 31 different vessels are scheduled into the operation at various times of the year. Reimbursement by the Department of Defense, however, is based on the equivalent of the number of full-time vessels that would be required.

Captain EVANS. This particular station, as the Admiral mentioned, is manned by Canada. This one on the east side is manned by

Norway. The other four are manned by Britain, France, and Netherlands, in rotation.

Admiral PERKINS. The four black ones in the Atlantic are ours and the two in the Pacific. You might point out where the Hawaiian Islands are.

Captain EVANS. Yes, sir. Here are the Hawaiian Islands, and this station is named Victor and the next one is station Nan, about halfway between San Francisco and Honolulu.

Admiral PERKINS. We name them according to the international alphabet. The Weather Bureau furnishes the weather observers. They are civilians put on board to make the trip, to send up the balloons and take the weather observations.

Mr. GARMATZ. Do these stations carry out any particular duty?

Admiral PERKINS. The basic thing is weather and then they are also used for search and rescue. One of them about 6 weeks ago picked up the survivors from a MATS plane. But the original thought of them is for weather observation.

Admiral RICHMOND. In addition to that, they are aids to navigation.

Admiral PERKINS. They have homing beacons on them for the planes flying over.

Mr. THOMPSON. What is the average cost of maintenance of one such station?

Admiral PERKINS. The total thing for 6 is about 17 million. It is about $2,800,000 for a station.

Mr. THOMPSON. That is operating full time for the entire year?

Admiral RICHMOND. That is right.

Mr. THOMPSON. Could you tell me this: I think there has been some discussion, and I know I have introduced a bill which may or may not be necessary to institute more of this service, but why would not the Caribbean and the Gulf areas benefit by the expenditures of, say, $2½ million for such weather reporting and rescue service?

Admiral RICHMOND. Well, sir, in the first place, as Admiral Perkins has indicated, these stations serve several functions; namely, the weather-gathering information, the search and rescue function, and the communications, as well as an aid to navigation. In addition to that, they have a further defensive advantage in that they are providing, to some extent, a radar screen. With respect to the gulf, it seems to me the first thing is why do you want a station in the gulf? If you want it purely for weather purposes, because it seems to me some of these other duties are not necessary, if you place the weather station in the middle of the gulf, it would not particularly serve commerce from the standpoint of search and rescue, or aid to navigation, because there are not a great many planes flying over.

As I say, if you made it purely weather, it is a question of whether you couldn't accomplish the same result much more cheaply than actually establishing a floating ocean station out in the middle of the gulf.

Mr. THOMPSON. Of course it was said earlier that the reason of navigational aids to civil aircraft was not one of the major functions of those in the Atlantic or the Pacific.

Admiral RICHMOND. It is not a major function, yet there is a large number of them, in fact all of them, that do utilize it, in those particular stations on the routes being followed, not only from the beacon

standpoint, but the minute they come within the scope of the radar they are usually vectored into the ship or close to the ship and out, from a position standpoint.

There is another thing that I might mention. Of course, I think if you get into the question of weather, that is more of a problem for the Weather Bureau than ourselves. We don't profess to be aerographers. But I have heard Dr. Reichelderfer, in reference to the bill that gave us the original authority after the war, say that the ideal situation as far as the ocean goes, would be to have an ocean station within roughly 800 miles of another one, because a storm can generate in a circle of, roughly, 800 miles.

If that is the case, if you look at the gulf, I don't know that there is too much chance of a storm generating in the gulf itself. If it is south of the gulf, there ought to be a means, in my opinion, to get weather information from down in that area without the expensive proposition of a ship.

Mr. THOMPSON. Perhaps that is true, Admiral, but yet the area of the gulf, and the coastline of the gulf, compared to the Atlantic coastline, from Miami up to New York, would be comparable, would it not?

Admiral RICHMOND. Yes; but it is in a circle instead of a straight line.

Mr. THOMPSON. But you have a terrific amount of commerce there, and there is a great development being made. Think as far as the number of persons whose lives are even at stake and whose equipment certainly is in danger of being lost by unreported storms. Most of the hurricanes originate down in the Caribbean, and in the east, and in part of the gulf. Yet most of those are unreported until some ship or aircraft happens to go through the area and sends in a signal.

Admiral RICHMOND. As I say, I think that would be a matter of statistics that the Weather Bureau could answer far more definitely than we could. It seems to me that is the test of it, how many storms do you have originating in the gulf area that hit unreported. If there were a sufficient number of them, then you have established your requirement.

Mr. THOMPSON. Then discounting weather, what is the other work of these stations in the Atlantic, discounting weather and sea rescue, which, of course, would be a problem in the gulf, and which is a problem. Your people, I think, have stated they would like to have better sea rescue facilities in the Gulf.

Admiral RICHMOND. That is correct, but I think as far as the rescue is concerned in the gulf, they would be more strategically located around the periphery to move in in the event of a situation. In addition to that, we are presently keeping, almost continuously, a vessel down on the Campeche Banks for search and rescue, and assistance to the shrimp fishermen down there.

Mr. THOMPSON. Yes. I can see because of the lack of funds you have gone no further than you have gone. But discounting the cost of weather reporting, and you have stated as far as giving out navigational aids to civil aircraft that is not a big part of these weather stations in the Atlantic, then what is their major function?

Admiral RICHMOND. We have indicated weather.

Mr. THOMPSON. The major function is weather?

Admiral RICHMOND. It is weather, sir.

Mr. THOMPSON. And yet the southernmost one in the Atlantic is north of the area where most of the hurricanes originate.

Admiral RICHMOND. That is correct, sir. But your hurricanes ordinarily originate in an area further south. I think last year the hurricanes didn't always follow the path that was prognosticated for them, but I don't know of a single instance where a hurricane hit in the northern area that was not spotted before it arrived.

Mr. THOMPSON. That is very true. Your larger hurricanes are. However, no one knows when a small disturbance will turn into a hurricane. That has happened. They have built up that way. Yet I know that millions of dollars are lost on these southern coastlines each year, either because of the people shutting down for fear or a rumor that a storm is to hit, or not shutting down for the lack of a valid report tracking the local disturbance which has hurricane intensity, yet which breaks up when it hits the coastline. So they are hurt both ways by the inadequacies of that weather reporting. I would like to see it developed. I know that in our relations with the Latin American countries, we have a lot of commerce and air travel between ourselves and the Latin American countries, and yet no thought is given to this type of service to those countries. It all seems to be going across to the European countries.

Admiral RICHMOND. I think statistically you can show that the majority of your traffic is in the area where the stations are presently located.

Mr. THOMPSON. What distance do you usually maintain between ocean stations for efficiency?

Admiral RICHMOND. These positions are positions that have been arrived at on the basis of international conference. We simply take the assigned position and maintain it.

Mr. THOMPSON. Who assigns the positions for them, Admiral?

Admiral RICHMOND. Since there are a number of countries all participating in this international agreement, they decide the locations in this conference of the stations. It comes under ICAO.

Mr. THOMPSON. Which agency in the United States represents our technicians who decide where the stations should be?

Admiral RICHMOND. In the last conference, the State Department, first, the Defense Department, and the Coast Guard had representatives there.

Mr. THOMPSON. Then the weather people are not consulted at all?

Admiral RICHMOND. Commerce was present.

Mr. THOMPSON. It seems they would be, if their major function is weather.

Admiral RICHMOND. I know also Defense had a weatherman.

Mr. THOMPSON. Thank you, Admiral.

The CHAIRMAN. That is evidently a quorum call. I have secured permission for the committee to sit during the debate. There will be 2 hours of general debate. I had to interrupt the hearings yesterday. I do not want to keep the Coast Guard up on Capitol Hill from their official duties on Pennsylvania Avenue indefinitely. We will continue the hearings, and I will call someone to the chair while I go and answer the rollcall, and such members as desire to answer and come back, of course, have that privilege.

You may proceed, sir.

Admiral PERKINS. The picture showed pretty well the ice patrol.

The CHAIRMAN. Just a minute, sir. We will run for 15 minutes, as Mr. Allen has suggested, then go answer the rollcall and come back and continue the hearing until 1 o'clock or around that time.

You may proceed.

Admiral PERKINS. The ice patrol was pretty well covered in the moving picture. However, it did not bring out that that is all set up by an international agreement under the State Department, and is paid for jointly by Belgium, Canada, Denmark, France, Great Britain, Greece, Italy, the Netherlands, Norway, Sweden, and the United States. We pay about $150,000 a year for that service. Here is shown a diagram of it. I could go into great detail, probably, but most of it was covered in the movie.

Mr. ALLEN. Mr. Chairman?

The CHAIRMAN. Mr. Allen?

Mr. ALLEN. Will radar determine the movements of iceberg?

Captain EVANS. I didn't catch your question.

Mr. ALLEN. Will radar pick up an iceberg?

Captain EVANS. Yes; it will. And from a surface vessel you can plot it pretty well. When you are scouting for ice from an airplane, however, things are moving pretty fast and you do not have enough opportunity to plot each and every berg, every pip that you get on your radar screen, in every case, to be able to determine definitely whether a pip is an iceberg or a ship. But from the ship's point of view you can determine when you have a pip that is stopped dead in the water and you assume it is an iceberg. You can make that determination fairly readily.

This shows down off the tail of the Grand Banks where the major danger area is, of course. Also shown are the transatlantic tracks crossing there. The bergs drift across there; they do actually become quite a hazard. X marks the spot where the *Titanic* went down in 1912 with 1,500 souls.

Admiral PERKINS. The next is our cooperation with the Weather Bureau. The Coast Guard cooperates with the Weather Bureau along three general lines. There is a program of taking and transmitting to the Weather Bureau information required by that Bureau from selected Coast Guard vessels and shore units; a program for dissemination of weather information to the maritime public from Coast Guard communication facilities; a program for the display of weather warnings at certain Coast Guard shore units and light vessels.

These programs are carried out in all Coast Guard districts and, additionally, the first program is carried out wherever Coast Guard vessels operate. At the present time over 150 Coast Guard vessels take and transmit weather information to the Weather Bureau when over 25 miles distant from the nearest known reporting station.

In addition, over 100 shore stations carry out a similar program on a routine daily basis.

From a communications standpoint, 10 Coast Guard radio stations each day make 2 scheduled broadcasts daily in order that the marine interests will be informed of the latest weather information. Special broadcasts are made when weather conditions indicate urgency. Visual flag hoisting warnings are displayed at 131 Coast Guard units within the continental limits of the United States and its Territories.

I would like to make it clear that the Coast Guard does not make up its own weather reports. They definitely are made up by the Weather

Bureau. This message that I referred to, this communication, is always headed, "This Is the Latest Weather Information Furnished by the United States Weather Bureau," and then the weather comes out. I bring that up because there was considerable confusion on the east coast during the various hurricanes last fall. The Weather Bureau furnishes us with the dope that goes out on the air.

Mr. ALLEN. What is the significance of a small-boat warning? What is a small-boat and how bad is it going to be?

Admiral PERKINS. Usually a 20- to 35-mile wind.

Do you mean a small-craft warning, the little red pennant?

Mr. ALLEN. Yes.

Admiral PERKINS. Yes.

Mr. ALLEN. Is that directed to a certain class or size of craft?

Admiral PERKINS. No, I don't think there is any size.

The CHAIRMAN. We will recess now and come back within 20 minutes.

(Brief recess starting at 11:25 a. m., and continuing until 11:57 a. m.)

The CHAIRMAN. The committee will come to order.

You may proceed, Admiral.

Admiral PERKINS. The next program is regatta patrols, which I would like to stress a little. Under the authority of law, we are authorized and empowered to issue regulations for the promotion of safety of life on navigable waters during marine regattas and parades, and to use Coast Guard vessels for the enforcement of such regulations.

The above law has now been implemented for the submission of regatta plans to the Coast Guard for approval when extra or unusual hazards to safety of life on navigable waters are introduced, for the detailing of patrol vessels, for the enforcement of special local regulations, and for the issuance of local notices to mariners, or related matters.

In the interests of maritime safety and within the limits of available facilities and personnel, the task of patrolling regattas requires marking of the areas by buoys, the publication of the notices to mariners, patrol of regatta courses and the prohibition of vessel movements that would endanger regatta participation and spectators. The operations involved present certain problems. This entails problems that are varied as to the many locations in which regattas are held. They involve extensive coordination with such civic, State, and Federal organization as may be involved as well as the commercial interests and merchant vessels whose movement may be restricted. Communication facilities provided by the Coast Guard are often essential to the coordinated safety effort. Personnel, boats, and other equipment are often unavailable at the location where a regatta is to be held and must be taken temporarily from the nearest Coast Guard activity.

During the period of July 1, 1954, to December 31, 1954, the Coast Guard patrolled a total of 570 regattas. Most of this is in the summer, from July to September. The greatest activity is in the New York district, with the Great Lakes, Boston, and Seattle doing the bulk of the remaining work. Within the last years, there has been a marked increase in this activity in the inland lakes and rivers. You can readily see, with the outboards and the many regattas, it creates quite a problem for us.

Another item that will only take a few seconds is the cooperation with the Coast and Geodetic Survey. I think you should know that we cooperate with them in providing a plane for high altitude aerial photography. For approximately 8 months each year, a Coast Guard B–17 flying fortress aircraft containing a special 9-lens camera is deployed on high-altitude aerial photographic missions throughout the United States and Alaska in accordance with the priority schedule of the Coast and Geodetic Survey. The aircraft operates extensively in Alaska during the summer months in order to obtain accurate photographs of previously uncharted and poorly charted areas. Most of the photographing is done at an altitude of from twenty to twenty-four thousand feet.

The Coast and Geodetic Survey furnishes technicians for the taking of the pictures, and the photographs are used in making charts and other aerial maps.

The next is our search and rescue program. The Coast Guard is responsible for the rendering of aid and protection of life and property upon the high seas and navigable waters of the United States and its Territories and possessions. This service may be rendered to aid persons or property at any time, or any place, at which the Coast Guard facilities and personnel are available and can be effectively utilized.

In the performance of this function, vessels and aircraft are deployed and operated to afford maximum protection to water and airborne commerce and lifeboat stations and communications are located and operated at strategic points along the coast and inland waters. Rescue facilities are directed through rescue coordination centers when operational missions are to promote efficient coordination and direct rescue within an established area, to operate operational control over forces assigned, to coordinate the activities of all participating forces in any particular case; additionally, to keep informed of all sources potentially capable of providing assistance or information and plan for their effective use.

The amount, size, and speed of water and airborne traffic has increased greatly during recent years. The actual number of distress cases has also increased, although fortunately not quite so much in the same ratio. If seamen and airmen are to receive the same protection as in the past, the search and rescue operation cannot remain static. Well-trained personnel with modern equipment, in keeping with the growth and traffic on and over the high seas and waters over which the United States has jurisdiction, are essential.

I might run down a few fast statistics. During fiscal year 1954, the number of assistance calls responded to were 19,402; the number of lives saved or persons rescued in peril 3,407; value of vessels and aircraft, including cargo, $333,790,000; number of vessels towed, 7,972; number of vessels refloated, 1,192; miles disabled vessels towed, 92,236.

I would like to take you now through a typical search and rescue case. On the evening of December 7, 1954, the marine radio operator at Tampa, Fla., received a frantic call from the commercial tug *Bertha R.* stating that she was in heavy seas, gale winds, and was sinking in the upper Gulf of Mexico. This information was relayed to the Coast Guard Air Station at St. Petersburg, who notified the Coast Guard rescue coordination center at New Orleans. The rescue

coordination center issued orders for the Coast Guard aircraft at Biloxi, Miss., and the Coast Guard cutter *Cartigan* at Panama City, Fla., to proceed and assist.

It is interesting to note that the Biloxi plane was airborne prior to receiving the orders, as the unit had intercepted the teletype message to the rescue coordination center, and also that the *Cartigan* was under way in less than 2 hours from the time of the original message to the marine operator. As the planes and cutter proceeded, a notice to mariners was issued by the Coast Guard rescue coordination center at New Orleans, and resulted in four freighters in the vicinity offering their service.

Shortly after the original distress message, the *Bertha R.* sent a message:

> I cannot remain afloat more than 30 minutes. The tug and barge are now about 6 miles apart. I have 11 men on board, with doughnut type liferafts. My engine room is now half full of water. Expect to lose communications in a few minutes.

Those were the last words from the vessel. A Coast Guard plane from St. Petersburg was the first to arrive on the scene, and in spite of the darkness and strong winds located the barge. Shortly after, the Biloxi plane sighted two liferafts in the glow of their aircraft parachute flares. The planes established radio contact with the *Cartigan* and merchant freighters and assisted in rendezvousing them to the scene a few hours before dawn. Although an aircraft was able to remain in the vicinity of the barge at night by use of radar, neither the aircraft or surface craft were able to keep the survivors in view.

After 2 hours search after daylight, the 2 rafts were seen, and a surface craft directed to the scene. A lifeboat from a freighter, *Helen Lykes*, picked up 4 survivors on 1 raft and the *Cartigan* picked up 3 survivors and 3 bodies that had been secured to the other raft. The *Cartigan* took all the survivors and bodies on board and proceeded to Panama City, Fla.

As on-scene commander, the *Cartigan* released the aircraft to return to their bases, released the commercial freighters, notified the rescue coordination center of the situation, and requested that ambulance and doctors meet the ship on its arrival in port. The Coast Guard feels that coordination of search and rescue facilities is essential to efficiency and economy. Note the part of the rescue coordination center in New Orleans. They directed Coast Guard air and search aircraft to proceed, alerted and obtained the services of merchant marine vessels, the owners and agent of the *Bertha R.*, the next of kin of the crew members, and the press, they were all kept advised of the situation, and made final arrangements for the care of the survivors and those less fortunate when they arrived in port.

We would like to invite you to visit one of our rescue coordination centers which operates 24 hours a day and 7 days a week. This invitation has also been extended to mariners and airmen as we know that search and rescue operations can be more efficient if those concerned can be more familiar with our facilities and procedure.

Admiral Richmond yesterday mentioned several that happened off Bermuda, several good cases, and also the ditching of the MATS plane which was picked up by the *Coos Bay*.

The CHAIRMAN. What is the limit of your search and rescue work? That is, do you consider it primarily limited to water areas, or just how far?

Admiral PERKINS. Well, if there is somebody in trouble——

The CHAIRMAN. I am speaking about search and rescue. What is the limitation?

Admiral PERKINS. I guess there is no limitation as far as the overall.

Admiral RICHMOND. Generally speaking by statute, it is limited to the high seas and navigable waters of the United States. But there is no fixed line.

The CHAIRMAN. Since aviation is such an outstanding mode of transportation, and it is passing rail and other transportation, and we have these wrecks, tragedies, does the Coast Guard respond to aid aviation accidents?

Admiral PERKINS. Yes, sir. I might say we also dropped the eggs to the City of San Francisco when it was snowbound. The City of San Francisco was a Southern Pacific train stranded in the snow in the Sierras a couple of years ago. We sent a helicopter up there and dropped eggs so they could have food.

Admiral RICHMOND. We may have lacked statutory authority, but we acted on a humanitarian basis.

The CHAIRMAN. With the expansion of aviation, it is interesting just how much expansion there has been in aviation in the Coast Guard, whether aviation in the Coast Guard has kept abreast of the expansion of aviation in commercial and civil life. Do you have someone here from the aviation section of the Coast Guard that we can ask some questions of?

Admiral PERKINS. I have Captain Linholm here.

The CHAIRMAN. Come up, Captain Linholm. I happen to know Captain Linholm, and I have high regard and respect for him.

Captain, I would like you to tell the committee just what is going on in the Coast Guard with respect to keeping abreast of progress in the aviation field. What, if anything, can be done to expand aviation in the Coast Guard, and in what manner can the Coast Guard render a larger service to all citizens.

STATEMENT OF CAPT. STANLEY C. LINHOLM, CHIEF, AVIATION OPERATIONS DIVISION, UNITED STATES COAST GUARD

Captain LINHOLM. We maintain and operate 9 air stations and 11 air detachments.

The CHAIRMAN. Give you full name, first, would you?

Captain LINHOLM. I am Capt. Stanley C. Linholm, Chief of the Aviation Operations Division. We operate 9 air stations and 11 air detachments. They are located in the Atlantic along the east and west coasts of the United States, the Gulf of Mexico, the Great Lakes, in Alaska, and throughout the Pacific area, wherever we have Coast Guard units. We operate a total of 126 aircraft, consisting of 30 helicopters, 17 large seaplanes, 32 land planes of various types, and 47 amphibious type planes.

The primary duties in aviation is search and rescue. However, we do perform various other services. For example, the international ice patrol. The majority of our work up there in locating icebergs is done by aircraft. We do a considerable amount of cooperation

with other departments. In the Pacific area, because of the isolated location of our loran stations, we transport personnel and supplies by air, furnishing logistic support to these loran stations and other units in that area.

We, of course, feel that we can use more facilities, the same as the Coast Guard as a whole. Recently, with the greater utility and the greater performance and reliability of helicopters, we are trying to get more helicopters in the Coast Guard.

About a year or so ago, some of our planes were getting a little old and obsolete, and we were able to obtain from the Air Force a loan of 15 modern amphibious aircraft to add to our fleet. We have a fairly flexible fleet of aircraft at the present time.

The CHAIRMAN. Is your fleet of aircraft primarily obsolete?

Captain LINHOLM. No, sir, they are fairly modern, I would say. We have a few planes that are getting a little old, but as a whole we have a fairly modern fleet of aircraft. Some of our planes may not be as fast as the more modern military type aircraft, but in much of our work speed isn't too essential. In a long search at sea, looking for a boat or persons in the water, sometimes it is better not to have too much speed and be better able to sight the objects.

Our aircraft are, as a whole, fairly modern, largely because we were able to obtain the 15 planes from the Air Force about a year ago.

The CHAIRMAN. Your acquisition of aircraft, is that through the general budget of the Coast Guard, or do you have to have special legislation to get additional new aircraft?

Captain LINHOLM. It is through the regular procedures. I understand that we have been restricted to 126 aircraft by the language of the Appropriations Act.

The CHAIRMAN. What has the appropriation to do with limiting, other than limiting the money, how it can be spent? They are not a legislative committee. How do they legislate to limit you to a certain number of aircraft?

Captain LINHOLM. You will have to ask Admiral Richmond to clarify that.

Admiral RICHMOND. It is a provision, sir, that has been included in the Appropriation Act since 1948. It is a limitation in numbers.

The CHAIRMAN. That is what I want to get at. Does the Coast Guard feel that a larger number of aircraft are essential to the proper performance of your functions?

Admiral RICHMOND. The answer to that is "Yes, sir." But if I may amplify Captain Linholm's remarks, with your permission, Mr. Chairman, I think the committee should understand that we came out of the war with a number of planes and, of course, to all intents and purposes they were wartime built. That number of planes, naturally, were going to be overage at or about the same time, since they were all wartime built planes. Back in 1948, fiscal 1949, we started a program of replacement. That program of replacement has gone along. It is not as rapid as we hoped it would be, but we have been successful in replacing approximately 50 percent of our planes. We still have about 50 planes that are either overage from a technical standpoint, approaching obsolescence, we will put it that way, or will be within the time that you can get delivery on new planes. That, I think, is our primary problem, the replacement of that balance of this original fleet of planes that we carried out of the war years.

The CHAIRMAN. So you are wholly dependent on the generosity of the budget and the Appropriations Committee of the Congress as to whether or not you can replace this fleet of planes that are becoming obsolete?

Admiral RICHMOND. That is correct, sir. You are always dependent on the amount of money you have for that purpose.

The CHAIRMAN. But there is no authorization or directive by statute as to the number of planes you shall have in the Coast Guard?

Admiral RICHMOND. That is correct.

The CHAIRMAN. Is there, by statute, a limitation on the number of vessels you shall have in the Coast Guard?

Admiral RICHMOND. No, sir.

The CHAIRMAN. To get a new cutter in the Coast Guard, do you have to have authorization, or is it built out of general appropriations?

Admiral RICHMOND. It is built out of general appropriations, sir, but in the past—and I don't know any requirement to this effect, but in the past—it has always been customary to first get authorizing legislation for vessels except for several ice breakers that were built during the war as replacement.

The CHAIRMAN. They were built out of national emergency funds?

Admiral RICHMOND. That is correct, sir. Those are the ice breakers. As you recall, some of them were loaned to the Russians. These were replacements for the originals. For the original ice breakers, there was authorizing legislation. But that has been customary in the Coast Guard over a long number of years, whenever a vessel was required, and I am speaking of a major vessel, to come to the legislative committee and get authorization. It probably dates back to the early 1800's and even before that, when cutters were largely built for the Coast Guard for particular places, such as the *Seneca*, and, I believe, the *Gresham*, which were built as derelict destroyers, primarily.

The CHAIRMAN. What percentage of your air fleet will become obsolete at what time?

Admiral RICHMOND. At the present time, sir, on the basis of the appropriation, maybe I could put it this way, and this is the same testimony that I gave the Appropriations Committee, assuming the present appropriation before Congress passes, we will have 50 overage planes, or which will be overage, within the next year or so. Those planes are essentially heavy planes. The replacement value of those planes, as near as we can estimate now, runs in the neighborhood of $57 million. We have worked out our present program, this 126 plane program which Captain Linholm mentioned, to this extent. We would feel it would actually be a mistake to get all of those planes at once, because you thereby create a hump at some future date. What we would like to see is for the succeeding 3 years after this one, because we can do nothing about this present year, an appropriation for airplane replacement of approximately $19 million, which, by fiscal 1959, with the delivery of the planes coming a little bit later, would put us in the position of having our fleet up to date, or reasonably up to date. We would be taking a certain calculated risk on overage during that period.

The CHAIRMAN. That is what I am interested in, too, these young men flying these planes.

Admiral RICHMOND. Let me make this point clear. The minute a plane gets to the point of being unsafe, we will ground it, even if it

means dropping below our ceiling of number of planes. We may not be able to be as efficient because we wouldn't have the required number of planes.

The CHAIRMAN. On the other hand, we want to see you efficient.

Admiral RICHMOND. I recognize that, sir. If I may proceed and lay out this program; for about the next 2 years we would need an appropriation of approximately $5 million, until about 1962, at which time we would be on a fairly level replacement basis of about 11 or 12 million dollars annually for aircraft.

Let me make this point clear. That is projecting potential losses; it is projecting length of time for utilization of a plane. There are many speculative estimates in here. But that would then give us, in our opinion, a turnover of planes that would keep our fleet generally current. That is predicated on the average life of seaplanes at 9 years, helicopters at 8 years, and land planes at 10 years.

Obviously, there are many land planes or some land planes that we can operate longer than 10 years. You get into a great many factors in this.

The CHAIRMAN. Do you think you need legislation to make permanent and secure the air arm of the Coast Guard and to keep it abreast of the times?

Admiral RICHMOND. I do not believe so, sir.

The CHAIRMAN. But you do have to have legislation for your vessels?

Admiral RICHMOND. As I say, I don't like to make a categorical statement on that. I say the practice in the past has been in the case of vessels, to come and get legislative authority for individual vessels or a particular building program before we actually undertook to seek the appropriations.

The CHAIRMAN. I don't want to be charitable, but I want to see the Coast Guard go forward with progress, and aviation is progress. It is superseding a lot of other modes of transportation today, and can be used and must be used in the safety field to a greater extent.

Mr. ALLEN. Mr. Chairman?

The CHAIRMAN. Mr. Allen.

Mr. ALLEN. I would like to ask a question there. Is it not true, Admiral, that with regard to the Army, Navy, and Air Force, there are statutes fixing the overall missions of the several forces, and also fixing their overall components of men and, I think, vessels, in the case of the Navy, and at least the organizations of planes in the case of the Air Force?

Admiral RICHMOND. Generally I would say that is true. I think you would have to examine various facets of that question, sir. For example, I know that the Navy has a plan worked out on so many operational ships. I know of no specific statute, though, that says that they can only have X ships of a type, or that their fleet should consist of so much. I know you get into this matter of aircraft carriers, and then that brings up special questions of authorization.

Mr. ALLEN. Do you think that any legislation fixing in one piece of legislation the mission of the Coast Guard and its general size on a manning scale, or whatever the proper terminology is, would be advantageous?

Admiral RICHMOND. Well, sir, as you probably know, we have some of these things ourselves. For example, the committee back in 1948

increased the number of authorized air stations that we could have from 9, I believe the figure was, or 8, to 15. Mr. Hand sponsored that bill. Also, with respect to personnel, in Public Law 218, passed by this committee, a ceiling was put on the number of commissioned officers that the Coast Guard can have. That ceiling is 2,250. Actually, at the present time we have more than 2,250 aboard, but is is under the provisions of the temporary act, or the act that permits the Navy to have additional, and when that act expires we are limited right now by a ceiling of 2,250 officers even though we have, as Admiral Kenner will tell you, at the present time some 2,600 officers on active duty.

Mr. ALLEN. Is the overall mission of the Coast Guard set out in law any place?

Admiral RICHMOND. Very definitely, sir. In that respect, I think we probably are as well off as any agency. If you will recall, in 1948, the Coast Guard had a very comprehensive management study by an outside organization known as Ebasco. After studying the Coast Guard at considerable length, their first recommendation—let's say one of their most important recommendations—was that Congress should give to the Coast Guard a mandate as to what the Coast Guard was to do, because at that time we were in the throes of such things as ocean stations and loran without any basic legislation as to whether we should do the job, whether anybody should do the job.

A bill was prepared and presented to this committee. It was actually a recodification of title 14, which is the title that covers all Coast Guard law. This committee, with the judiciary, revised title 14, and now we do have, I would say, a fairly concise mandate now as to our duties, and certainly much better than it was in 1948.

The CHAIRMAN. Mr. Garmatz?

Mr. GARMATZ. Captain, did I understand you to say that you would have more use for more helicopters?

Captain LINHOLM. We are gradually finding more use for them in the Coast Guard as they are developed, yes, sir.

Mr. GARMATZ. Do you have a sufficient number of them or do you feel you could use more?

Captain LINHOLM. We feel we can use more, yes, sir. We are gradually replacing some of our small amphibian aircraft with helicopters, in our plans for the future. Our small aircraft, small amphibians, in our plans, will gradually be replaced by helicopters.

Mr. VAN PELT. Captain, are you familiar with the recent rescue up in Michigan? Mr. Cederberg was telling me about it this morning.

Captain LINHOLM. No, sir, I am not familiar with it. I heard them talking about it here but I am not familiar with it.

Mr. VAN PELT. I thought it was a good illustration where the rescue was effected with the use of helicopters.

Mr. BYRNE. Admiral, I heard you testify about the rescue of the *Bertha R.* They had doughnut-type life preservers. Does the Coast Guard check each and every vessel that leaves the port for lifejackets, boats, et cetera?

Admiral PERKINS. At the regular inspection, but not when it leaves. That is at the annual inspections.

Admiral RICHMOND. This was not an inspected vessel. I am quite sure.

Mr. BYRNE. Does the Coast Guard inspect the vessels when they leave the ports?

Admiral RICHMOND. Those that are required to come under the merchant marine inspection, yes, sir, or under some specific provision of law. We do not inspect them before each trip out of port; no, sir. The answer to that is definitely "No." But any merchant vessel, for example, has an annual inspection, and at that time the life preservers are checked.

Mr. BYRNE. Once a year.

Admiral RICHMOND. In addition, under the Motor Boat Act, any vessel coming under the Motor Boat Act must have aboard an approved life preserver for every person aboard. That is, one that has been approved by the Coast Guard. Those are not inspected vessels. The way we get those is by boardings, spot check, and if you find a man who does not have the approved type of lifejacket, then, of course, he is subjected to a fine under the provisions of the motorboat law.

Admiral HIRSHFIELD. These lifejackets are not the type that you put around you. In other words, I think the vessel was not required to carry a life raft, but had instead these doughnut-type life rafts. But they did, I assume, have the regular body-type lifejacket along with it.

Mr. GARMATZ. Admiral, or Captain, whoever can answer it, you say there is a yearly inspection for the ships that come under your supervision. Which ones are they that do not come under your supervision? Are they American ships? It would not be foreign ships, because you would not have any control over them.

Admiral RICHMOND. I think Admiral Shepheard can give you a much more concise answer than I can, but essentially any vessel that is under 15 tons and not engaged in carrying passengers or freight for hire is not subject to inspection.

Mr. GARMATZ. Any other American ship would be?

Admiral RICHMOND. Well, fishing vessels are not, sir.

Mr. BYRNE. How about the *Queen Elizabeth*, the *Queen Mary*, and some of those ships?

Admiral RICHMOND. Under a rule of comity, they, of course, are subjected to their own inspection, and we do not inspect them because we acknowledge the British system just as our ships in their ports are accorded the same privileges from that country.

The CHAIRMAN. Do we recognize the inspection system of all countries? Is there any question about any country sending a passenger ship into American ports, that carries American nationals, as to their safety regulations and so forth?

Admiral RICHMOND. Yes, we do reserve the right to inspect the vessel if it is carrying passengers.

The CHAIRMAN. Any further questions? Now, back to the aviation field. The personnel in aviation, do they rotate strictly within aviation or do they go through the various functions of the Coast Guard?

Captain LINHOLM. Well, the technical people, the aviation machinist mates, radio men, technicians, et cetera, rotate within aviation.

The CHAIRMAN. And the officers, the fliers?

Captain LINHOLM. The officers stay in aviation as long as they can pass a physical and keep up their qualifications, or, unless, due to some board, certain ones might be dropped for lack if interest or proficiency in aviation.

The CHAIRMAN. That is similar to the system in the Navy, could we say?

Captain LINHOLM. It is somewhat along the same lines, but not exactly the same.

The CHAIRMAN. Does it make for the best efficiency in aviation?

Captain LINHOLM. Yes, sir. I think it is desirable to eliminate along the way those that do not meet the certain high standards of performance, and interest and adaptability in aviation.

The CHAIRMAN. I mean, does a man serve 4 years in aviation and 4 years aboard a ship?

Captain LINHOLM. There is no regular procedure for such rotation.

The CHAIRMAN. Any questions?

Mr. ALLEN. Captain, do the people that go into aviation have any basic training or experience before they get into the Coast Guard aviation which familiarizes them with the practices of the other parts of the service?

Captain LINHOLM. Yes, sir. Most of our officers who have become aviators in the past have been Academy graduates and have had 2 years on a ship at sea. Then they apply for aviation and go through Navy flight training at Pensacola and Corpus Christi. The enlisted men, of course, are trained up through the ranks, and then through our technical schools to become radio men or mechanics, et cetera.

The CHAIRMAN. Is that where your aviation training school is, Corpus Christi?

Captain LINHOLM. We get primary flight training at Pensacola and advanced training at Corpus Christi.

The CHAIRMAN. Is that Coast Guard?

Captain LINHOLM. No, sir, that is a Naval Air Station. Training of radio men and mechanics is done at Elizabeth City, N. C.

The CHAIRMAN. What, if anything, can be done to aid aviation in the Coast Guard in the way of legislation?

Captain LINHOLM. I cannot think of anything, Mr. Chairman.

The CHAIRMAN. Any questions?

If not, you may proceed, sir.

Admiral PERKINS. I would now like to go into the port-security program. Part of the previous discussion was on boarding and general law enforcement, so I would like now to present the port-security program. The basic authority for the port-security program is contained in the Espionage Act of June 25, 1917, as amended by Public Law 679 of the 81st Congress, 2d session, known as the Magnuson Act. Implementing regulations were issued by Executive Order 10173, as amended.

THE NATURE OF THE TASK

The Coast Guard is vested with the primary responsibility of implementing and enforcing regulations and directives of higher authorities pertaining to the port-security program. The program has been limited to control of entry of merchant vessels into certain ports of the United States, security screening of merchant seamen, security screening of longshoremen and others seeking access to waterfront facilities, supervision and restriction of piers handling United States military shipments and designated port areas, supervision of loading commercial class A explosives, military explosives, issuing permits when required by the regulations, and spotchecking other dangerous cargo operations.

The operations involved are as follows: At the present time, the Coast Guard is maintaining a 24-hour continuous harbor-entrance patrol at 10 major and 4 intermediate ports. Two additional ports will be covered by October of this year. This task involves keeping a close check on all inbound vessels in order that they may be accurately identified and given proper security treatment. The treatment given vessels is dependent on the nationality of the owners or operators, origin of the cargo on board, and the location of foreign ports visited within a specified number of months prior to the arrival at the harbor entrance.

Those vessels which do not have a clean bill are boarded and searched to determine if there are any persons or things on board which are considered inimical to the national interest. If the vessel's papers are in order and the vessels are clean they are allowed to enter but are kept under surveillance. Under certain conditions, vessels are detained pending a decision as to the disposition, and may be denied entry to these ports in the interest of national security.

The administration of the screening program, pertaining to merchant seamen and longshoremen requires field and headquarters personnel for handling applications for the specially validated merchant mariners document and the port security identification card. This procedure involves referral of the application to the FBI for a check against its subversives and criminal files and for such other data considered of interest in the individual cases. Where indicated, other agencies of the Government are consulted.

In those cases where the information or record is adverse to the applicant, the case is reviewed by a Coast Guard evaluation board, which recommends either denying or granting the credentials sought. In the event an applicant is denied a security clearance, he is so informed and provided with a bill of particulars in support of this action. Applicants who are denied clearance may appeal to a local appeal board for review and reconsideration.

If the recommendations of these boards are adverse, then the applicant may make recourse to the national appeal board for a second review. The action of the Commandant is based upon a recommendation submitted by the national board and is final.

To give added protection against sabotage and subversive activities and accidents, operations involving military and explosive cargoes are protected by restricting the areas in which such operations take place within certain ports. This entails declaring a zone of operation restricted, and where deemed necessary the assignment of a shoreside or waterside patrol or both until the operation is terminated. Access to restricted areas is limited to personnel holding proper identification or security credentials. Mandatory supervision of explosive loading is restricted to class A explosive only.

This task involves the following: Preloading inspection of commercial vessels destined to carry explosives, inspection of proposed explosive loading facilities, and issuance of permits authorizing their use, issuance of permits to vessels for loading or discharging, actual supervision of explosive operations by Coast Guard personnel trained in the handling of explosives.

That, basically, is the port security program.

The CHAIRMAN. Any questions?

Mr. Garmatz?

Mr. GARMATZ. Admiral, have there been any changes in the regulations outside of the one that I think was passed regarding the loading and unloading of explosives, since the South Amboy explosion? Are there any new regulations that have been put into effect?

Admiral RICHMOND. I am not sure I understand the question, Mr. Garmatz. Are you referring to the report of the special committee of this group?

Mr. GARMATZ. Yes, sir.

Admiral RICHMOND. After that, and following that, there was quite a lot of discussion about recommendation 5 of that resolution, which said that no permit would be granted unless the facility met the requirements of the American table of distances. The Coast Guard interpreted that expression by this committee, and the adoption by Congress—when I say this committee, I mean the special committee—as being a prohibition, and that caused, as you will recall, some unfortunate incidents at Seward and Honolulu. As a result of that, Mr. Boggs, now Governor Boggs, of Delaware, introduced a bill which did relieve us of that definite mandate. I don't know whether that was what you had in mind or not.

Mr. GARMATZ. That was one thing. But, in general, are you keeping a closer watch over those things?

Admiral RICHMOND. Yes, sir; we are, for this reason. Following that, two things happened. One was the Korean situation and the other was the Magnuson Act. As you recall, at the South Amboy situation, we were only operating under the Dangerous Cargo Act, so that our authority really only went to the vessels, not to the waterfront area. With the passage of the Magnuson Act and the extension under Executive Order 10173, we have the responsibility for waterfront facilities.

Then the Korean situation came along and we obtained a number of personnel for this particular duty. It was not a large number, but we do have more personnel today than we had at the time of South Amboy, and we are controlling it much more closely than we could control it then.

The CHAIRMAN. Any other questions?

Does that conclude your statement?

Admiral PERKINS. I wanted to say a little about military readiness.

The CHAIRMAN. Yes, sir.

Admiral PERKINS. That would complete my statement.

On our military readiness program, the task is to train individuals and units to the highest practicable degree, consistent with civil responsibilities, to fulfill wartime missions assigned by the Navy. Operations involved are determined by the missions assigned to the Coast Guard by the Navy mobilization plan. The Coast Guard mobilization plan supports the Navy plan by assignment of wartime, or emergency, missions and tasks to units of the Coast Guard.

On the basis of assigned task, training programs are established for various classes of units. Operational readiness inspections and underway training at Navy fleet training commands are conducted for major vessels on a 15-month cycle. This training includes instruction and practice in such specialities as offensive and defensive antisubmarine warfare, surface and antiaircraft gunnery, damage control, and atomic, biological and chemical warfare defense, all culminating in realistic battle problems using live submarines, aircraft, towed targets and drones.

Thirty cutters are scheduled for training during this fiscal year. Seventeen of these vessels have successfully completed their training. Three received an "excellent" evaluation. The proficiency attained at this training is maintained by additional shipboard drills and firing exercises conducted periodically throughout the year. Operational training for the remainder of the armed vessels is accomplished by five Coast Guard mobile training detachments and Coast Guard conducted antisubmarine and gunnery exercises. These detachments train the smaller units in antisubmarine warfare, gunnery, and damage control, including defense against unconventional weapons.

The CHAIRMAN. Any questions?

Mr. Allen.

Mr. ALLEN. As a matter of practice, how does the operation of the Coast Guard as a part of the Navy take place in wartime? Does the President issue an Executive order to the Commandant of the Coast Guard, who is then subject to some orders from the Navy?

Admiral RICHMOND. It is really automatic, although it is usually confirmed by an Executive order as far as being in a war. Of course, the President may do it wherever the condition warrants. The Commandant then comes under CNO, under the Secretary of the Navy and CNO, and has a position comparable to a bureau chief in the Navy.

I might, for the benefit of the committee, say that all our war plans and everything are developed in connection with the Navy so that we are prepared for that type of an eventuality and can move in with a minimum amount of lost time for change. That is one reason, as you will recall, why our districts are laid out more or less comparable to the Navy districts, so that our district commanders keep in very close liaison with the naval district commanders, because they, in turn, would be working under such officers in the event of an emergency.

The CHAIRMAN. Any other questions?

If not, thank you very much, Admiral.

From time to time, it will be possible for the gentlemen who appear here to take the transcript and make grammatical corrections or to extend their remarks.

Who is the next witness?

Admiral RICHMOND. We were going to have Admiral Kenner, but I think the committee plans to adjourn at 1, leaving only 15 minutes. I may suggest perhaps Captain Arrington, who is our Comptroller. I don't know whether the committee would want to go into his matters to any great extent. Perhaps it would just about fit in in the remaining time. I think you will probably be more interested in the personnel matters.

Captain Arrington is our Comptroller and in charge of all finance and supply.

STATEMENT OF CAPT. CHARLES B. ARRINGTON, COMPTROLLER, UNITED STATES COAST GUARD

The CHAIRMAN. Would you give your full name, Captain?

Captain ARRINGTON. I am Capt. Charles B. Arrington, Comptroller.

The CHAIRMAN. I presume that all of your officers who have appeared here are graduates of New London?

Admiral RICHMOND. Yes, sir; so far everybody who has been here.

The CHAIRMAN. When I ask for background, that is what I mean.

Admiral RICHMOND. Yes, sir. Of course tomorrow or the next day Admiral Shepheard will be here. Only one of the officers accompanying him will be an Academy graduate. The others were formerly with the Bureau of Marine Inspection and Navigation, or joined the Coast Guard from other sources.

Captain ARRINGTON. Mr. Chairman, and members of the committee, the general direction of financial, supply, and statistical reporting matters is under the Office of the Comptroller at our central headquarters. This office also makes the payment of military personnel allotments and retired pay, the consolidation of servicewide statistical reporting, and performs the headquarters unit procurement and accounting.

In the field, the comptroller organization extends to the staff of the 12 district offices and 4 larger shore activities.

Financially, the Coast Guard today is operating within a complete accounting system in which budget preparation and controls are integrated with the accrual of actual costs. Supplywise, we have the basic framework for a sound program, including direct support by the Navy for a large portion of our requirements. There are, of course, many areas in both fields where further improvements are planned, since our present systems are only a few years old.

After World War II, in 1947, Congress initiated an independent survey of the administrative management and fiscal policies and affairs of the Coast Guard. That was Public Law 299, 80th Congress, and is the same survey to which Admiral Richmond referred earlier. The objective recommendations stemming from that survey cleared the path for major improvements in our fiscal and supply operations. Among the first steps made possible was the employment of a nucleus staff of qualified accountants and supply specialists. Equally important was management's recognition of the role that accounting, inventory control and other such devices must serve in today's Coast Guard.

Also, we have found that the cooperative efforts of the accounting system staffs in the General Accounting Office, the Bureau of the Budget, and the Treasury Department, have done much to simplify or eliminate many outworn procedures which did not fit into the pace of modern Government business.

In our accounting, after several years of trial and adaptation, we have learned that the individual Coast Guard activity, such as a ship or a station, is the most practical basic unit for budgeting and for cost accumulation. After recording, the costs of like units are gathered together into classes for comparison and analysis. In turn, the totals for classes are consolidated into major activities for external presentation and review.

Using this pattern, we have a cost picture which, in general terms, follows the chart now on the easel. Our reporting is varied, of course, to suit a particular management problem or requirement. Also, in our reporting we show the number of units operated, or other required data, as well as financial information.

SIGNIFICANT FEATURES OF ACCOUNTING SYSTEM

An element of our system, unique among the military services, is the reporting of the total of all direct costs for each unit, including the costs of the military personnel assigned. Thereby, each commanding officer is afforded a clear view of the financial aspect of his operation.

Another feature of interest is the tying in of costs with obligations, which is made possible with the integration of cost and appropriation accounts. It will be noted that we have two separate activity classifications shown as supporting programs and other military personnel expense, which include expenses which cannot be costed direct to the operating units. These items include, for example, replacement of certain high cost equipment, such as electronic equipment, permanent change of duty station, and severance benefits for military personnel, which are budgeted separately on the same basis as cost.

FINANCING OTHER PROGRAMS

Apart from operating expenses, a separate appropriation and cost report series is used for construction projects and for the acquisition of aircraft and larger vessels. These projects are grouped for review into the same activity classification as used for operations, and as illustrated on the chart.

Other separate appropriations are provided for the Reserve training program, and for retired pay, respectively. For financing industrial work at the Coast Guard yard, our principal activity of this nature, a special fund was authorized as section 648 of title 14, United States Code. The accounting and reporting under this fund provides management with a business-type information suited to yard operations and problems. All costs are financed and reported under the fund, including military personnel and including depreciation, except for real property.

The yard, in effect, is a self-supporting establishment.

At smaller industrial activities, we have adopted a similar but simpler accounting technique within the framework of the annual appropriation. For several of these units, a system has been developed to require the financing of all costs, including military personnel, in a single budgetary account, which, in turn, is supported by funds provided for each project order at the time of authorization.

The CHAIRMAN. Let me interrupt you. What kind of industrial facility do you have?

Captain ARRINGTON. In addition to the Coast Guard yard at Curtis Bay, Md., which is the largest facility of this type, we have 28 industrial operations at smaller bases and depots. They do such work as repairing buoys, engines, and aids to navigation material generally.

It is expected to extend this feature to all these industrial units. Eventually, when we have resolved the management problems involved, it is hoped that we can shift over to the use of the special fund authorized by Congress in all activities of this kind to overcome the inherent difficulties met each year end under an annual appropriation.

In inventory financing, we are also using a special revolving fund authorized under section 650 of title 14, United States Code. This covers rapid turnover, staple items, and provisions and clothing. Here, too, the fund is self-supporting and the accounting and reporting is on a business-type basis.

On the other hand, for technical supplies and equipment, inventories are still financed under the annual appropriations. The desirability of consolidating all inventory financing under the revolving fund has been considered, but as yet without final resolution of the budgetary problems involved in this step.

DECENTRALIZATION OF FINANCIAL RESPONSIBILITY

In its actual operation, our accounting is decentralized to the 12 district offices, with central consolidation of the reports. This pattern ties in with that intended for control of expenditures, and it follows the principle that financial responsibility must go hand in hand with operational responsibility.

The CHAIRMAN. What is your percentage of personnel in your central office compared with the personnel in the decentralized offices, that is, district offices. Is that what you mean?

Captain ARRINGTON. The overall percentage of headquarters personnel to the total Coast Guard personnel is about 6 percent, if that answers your question.

The CHAIRMAN. Take a district, for instance, in your operation, in the Comptroller's Office. You decentralize your work to the district, as I understand it. Then it is reported here. How many people here audit the reports that come in from the 12 districts?

Captain ARRINGTON. We have, as I recall, 30 persons in our Central Accounting Division.

The CHAIRMAN. Thirty people here checking the reports that come in from the 12 districts?

Captain ARRINGTON. Yes, sir.

The CHAIRMAN. How many people are there in the 12 districts?

Captain ARRINGTON. The total number in accounting in the 12 districts? Perhaps I could furnish that for the record later. My recollection is it would run around 300.

The CHAIRMAN. You say you have 6 percent of the personnel in the headquarters office, 6 percent of the total personnel of the Coast Guard being in the headquarters office?

Captain ARRINGTON. Yes, sir; approximately 6 percent.

The CHAIRMAN. And this branch of yours is just about that percentage?

Captain ARRINGTON. Approximately the same order; yes, sir.

The CHAIRMAN. Perhaps you can get a chance to review that and correct it, if it is wrong.

Captain ARRINGTON. I might say that the accounting personnel are only a part of our operation. We have people that plan and administer supply activities, budget and internal audit.

(The information is as follows:)

Coast Guard personnel, Feb. 28, 1955

	Total in service	At headquarters	Headquarters percent of total
Military	27,699	319	1.1
Civilian	5,037	833	16.5
Total	32,736	1,152	3.5

Personnel performing accounting, Dec. 31, 1954

	Number of employees
Accounting at Coast Guard field offices	126
Accounting at Coast Guard Headquarters for Headquarters and Headquarters units (4)	17
Consolidated servicewide accounting control and reporting functions at Headquarters	13
Total	156

The CHAIRMAN. I see.

Captain ARRINGTON. In some expense areas, we must deviate slightly from the pattern I have described because of the military nature of the organization. Primarily, the control of military personnel is determined by the overall rate structure which is established centrally, so as to maintain proper internal proportions. Similarly, rotation and promotion policies and recruiting quotas are determined centrally. Within the total personnel structure, specific billet allocations or complements are established by headquarters for each unit. However, the field commands must charge the actual military personnel costs incurred against an open-end allotment, thus exercising financial responsibility in this matter to a compromise degree.

PROBLEMS OF SUPPLY MANAGEMENT

Going back several years to the initial stage of our present program, at that time three fundamental problems appeared most important. Without inference of priority, the first was to get all our inventory identified, recorded, and taken up in the accounts so we would know what we had on hand. The second was to decide upon the most appropriate stocking points and supply facilities. The third was to establish a sound list of items to be stocked.

Along with these problems, we recognized at that time the incidental need for the overhaul or development of detailed procedures for supply management and operations. Since then, some progress has been made along all of these lines, and we have completed the fundamental task of inventorying all of the material on hand.

Now, in the second stage of our program, we are shaking down the system. For one example, we are disposing of much material found to be junk, obsolete, or no longer required. For another, we have moved and combined some of our field facilities so as to use Navy space wherever suitable and available. In a third area, we are shifting to direct support from the Navy sources for items available in Navy stock. This latter move permits us to eliminate stocks of Navy materials in our supply depots.

From the management viewpoint at this time, the field in which supply progress has been most difficult is in developing adequate and necessary information for listing those items we repetitively use but which are not available from other Government agencies. This information is required as a necessary foundation for development of well-planned supply policies. These items concern, for example, or comprise, parts and components for aids to navigation, for special engines and electronic equipment, and various distinctive items of the Coast Guard.

In respect to these items which may be called peculiar to the Coast Guard needs, the Coast Guard has sole responsibility for (*a*) development of specifications; (*b*) identification and catalog; (*c*) determining when and where to stock, and (*d*) standardizing wherever desirable and practicable.

The CHAIRMAN. Do you have a standard catalog?

Captain ARRINGTON. We have a standard catalog, sir, but it is in conjunction——

The CHAIRMAN. Does that catalog list every item, let me say, that is just alike under one standard, so the items would be interchangeable?

Captain ARRINGTON. We are working in that direction, Mr. Chairman. I might go on here to say that our work in this field is carried on with the guidance of the Department of Defense organizations established to carry out Public Law 436, 82d Congress.

Mr. GARMATZ. That is a regular cataloging program that they are working on?

Captain ARRINGTON. Yes, sir.

The CHAIRMAN. They have been working on that for about 6 or 7 years.

Captain ARRINGTON. Yes, sir. It is only recently that they have begun to make any real progress.

The CHAIRMAN. I was hoping you had a catalog. Mr. Garmatz and I were on the expenditures for these catalogs, and we have not seen anybody making any progress in catalogs. When you mentioned catalog, I had hoped that you had one. Nevertheless, proceed.

Captain ARRINGTON. Without going too much into the background, with which I am sure you are familiar, our progress inevitably must be tied in with the progress made by the Navy, because at least 50 percent of the items that we use are Navy items. We have these areas that I mentioned that are not Navy, and they are the responsibilities, of course, of the Coast Guard.

In our comptroller activities, we have established workload measures covering each function, and we maintain a frequent review and comparison of cost. Financial reports and also cost comparisons are also prepared for the information and action of responsible managers both in the field and at the several review levels in headquarters, and in the Treasury Department.

We feel as a result of continued emphasis in recent years, there has been a widening recognition of the importance that comparative costs should bear in most management decisions.

That is the end of my statement, Mr. Chairman.

The CHAIRMAN. Any questions?

Mr. Allen?

Mr. ALLEN. I notice on the chart that the retired pay is a little over 10 percent of the total budget. I wonder if that is a figure that

is a fair measure of the proportion of the budget that is used for retired pay in the several branches of the Armed Services.

Captain ARRINGTON. For your information, I might explain that our retired pay appropriation includes retired pay for the former lighthouse service who were civilian employees. In other words, this appropriation is not entirely for military pay. In that respect, it would not be comparable to, say, the retired pay of the Army. In addition, the Veterans' Administration pays a great deal of what is substituted for retired pay. In other words, whenever a person is eligible for a pension in lieu of retired pay, he is entitled to choose the pension.

I feel that in the other Armed Forces a good share of their retired pay costs are provided through the Veterans' Administration rather than through direct retired pay appropriations. To answer your question specifically, I just don't think that the comparison would be fair.

Mr. ALLEN. Thank you.

The CHAIRMAN. Any other questions?

If not, thank you very much.

Mr. ALLEN. I have a question, Mr. Chairman.

The CHAIRMAN. Mr. Allen?

Mr. ALLEN. Could I ask Admiral Perkins a few more questions?

Admiral, I noticed that in that rescue at the gulf there was a barge involved, which reminds me of the salvage situation. Is there a responsibility in the Coast Guard to undertake salvage of the vessels at sea as well as rescue the personnel?

Admiral PERKINS. That is right.

Admiral RICHMOND. It depends on what you mean by salvage, sir. First, the Coast Guard does not interfere with private enterprise. Our general directive is that we are interested in saving lives and saving property. If that barge could be gotten out of the shipping lane, so it was no longer a menace, by towing, we would do it. If a commercial tug came on the scene, once the danger is passed, we would turn it over to the commercial tug.

Mr. ALLEN. The question was prompted by an argument on the Pacific coast between the Navy and some of the private salvage operators. There it seemed to me I ran into a provision of law which gave the Navy a responsibility to make sure that salvage facilities were available, either through private sources or, if not, by contract which the Navy would enter into under some arrangment. My question was particularly as to where the lines of responsibility run, whether the Navy and the Coast Guard have fields that are overlapping, and properly so, possibly, or whether everybody does what he can.

Admiral RICHMOND. Ours is a job of safety and the saving of people. That is the primary consideration. I think the bill or law that you refer to, of course, goes back to, first, defense requirement that they maintain for their own purposes, and have a continuing maintenance, salvage equipment and salvage control. To do that, they have either to set up their own salvage equipment or they may contract with Merrit-Chapman-Scott, or someone of that nature, to provide salvage equipment. When the Navy does a job, they charge for it, whether it is done by a Navy craft or by one of these contract operators.

Mr. ALLEN. Then is it fair to say that you do what you can with the equipment you have available but do nothing beyond that?

Admiral RICHMOND. That is correct.

Mr. VAN PELT. What happened to the barge in question?

Admiral RICHMOND. I would have to look at the report. I think it sunk, but I am not certain. You see, if it hadn't or if it had become waterlogged beyond salvage, we would have sunk it ourselves to get it out of the sealanes.

Mr. VAN PELT. Then you say, Admiral, the Navy charges for some of the salvage operations. Does the Coast Guard ever charge, assuming you had salvaged this?

Admiral RICHMOND. We have not for over 100 years. Back in the early days they did. I believe it was about 1840. They used to give prize money. That was knocked off. We have always felt that our job was purely that of rescue. Once the period of danger is passed, and there is somebody that can take the job over, they take it over. We may stand by to be sure nothing goes wrong, but it becomes a commercial venture after that.

The CHAIRMAN. That concludes the hearing this morning. We will now recess until 10 o'clock tomorrow morning.

(Whereupon at 1:15 p. m., the hearing was recessed, to reconvene at 10 a. m. Thursday, March 24, 1955.)

STUDY OF THE OPERATIONS OF THE UNITED STATES COAST GUARD

THURSDAY, MARCH 24, 1955

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D. C.

The committee met at 10 a. m., pursuant to notice, in room 219, Old House Office Building, Hon. Herbert C. Bonner (chairman) presiding.

The CHAIRMAN. The committee will come to order.

The committee has before it this morning Rear Admiral Shepheard, of Marine Safety in the Coast Guard.

Would you give your full name and background, please, for the record.

STATEMENT OF REAR ADM. HALERT C. SHEPHEARD, CHIEF, OFFICE OF MERCHANT MARINE SAFETY, UNITED STATES COAST GUARD

Admiral SHEPHEARD. My name is H. C. Shepheard, a rear admiral of the United States Coast Guard. My official title within the organization is Chief, Office of Merchant Marine Safety.

Mr. CASEY. Do you have a prepared statement, Admiral?

Admiral SHEPHEARD. No, I do not. I have some charts on the easel here that will indicate the type of organization which I head up.

Mr. CASEY. Would you proceed in your own way, please?

Admiral SHEPHEARD. The Office of Merchant Marine Safety has the overall responsibility for preventive safety, where there is the action of promulgation of regulations, inspections, and whatnot, to prevent accidents. It is not the glamorous type of activity, such as is performed by some of the other offices of the organization, such as air-sea rescue, and so on. We maintain a rather close relationship with maritime interests, including maritime labor. We need their cooperation in carrying out our many programs aimed to improve safety at sea.

The Chief of the Office of Merchant Marine Safety is also the chairman of the Merchant Marine Council. The Merchant Marine Council actually is under the Office of the Commandant. It is understood, of course, that the Office of Merchant Marine Safety is under the direction and supervision of the Commandant's office.

The Directives and Publications Section arranges for the publication of regulations, public hearings, and what have you. We have quite a large number of regulations controlling the activities of the merchant marine. These publications on the table are some of the regulations implementing the laws that you gentlemen pass.

The Office is broken down into three principal sections. There is the Inspection Division, the Technical, and the Personnel Divisions. The Technical Division is the one that picks the program up at the cradle. That is where the plans and the specifications are examined and approved before construction of the vessel is started. Then the Inspection Division covers the inspection of such items as the boilers, life preservers, lifeboats and various other items of equipment, as well as the ship itself, and indicates the number and the ratings of the men who are required to serve aboard that ship. It also covers marine casualties. It arranges for the boards to make the investigations, and it reviews the casualties. It also covers the various motorboat laws and the navigation laws.

The Personnel Division sets up the standards for licensing, certification, and shipment of merchant seamen. Also we have in foreign countries some merchant-marine details.

Now, we step into a little greater detail on the next chart, on the Technical Division which is broken down into the various divisions, electrical engineering, marine engineering, naval architecture, hull plans and loadline, and scientific sections.

The equipment records, for example, contain a listing of the approved equipment. The division works on standards and specifications for various items of equipment.

If there is no question, gentlemen, we will go on to the next chart.

Next is the Inspection Division, as shown on this chart. Here we have the annual inspections and periodical inspections, drydock examinations. We do get copies of certificates at headquarters to examine them, and we also get other reports aimed to bring about uniformity in administration. It is likewise, as I mentioned, the division which analyzes the casualties, looking toward corrective action to be recommended to the Commandant.

The CHAIRMAN. Let me interrupt you a moment, Admiral Shepheard. What working arrangement do you have with the Maritime Board or the Chairman of the Maritime Administration with respect to inspecting or examining their reserve fleet, ships coming in and out of the reserve fleet?

Admiral SHEPHEARD. Vessels entering the reserve fleet?

We have no control over those entering whatsoever. It is only when they come out of the reserve fleet and go into operation that we are called upon to make an inspection and issue a certificate.

The CHAIRMAN. The Trade In and Build Act provided that vessels received in trade should be in class. Who would the Maritime Administration get to make that determination?

Admiral SHEPHEARD. If the clause stated that the vessel must be in class and that is all it stated, they would make that arrangement with the American Bureau of Shipping, which is a classification society, recognized by our statutes. If the clause was that the vessel shall be in class and in compliance with all applicable laws and regulations, which oftentimes is the case, then it also must have a Coast Guard certificate. The agent for the Maritime Administration would make application to our local office for inspection, looking toward certification.

The CHAIRMAN. During the time that the Maritime Administration is reviewing the vessels in the reserve fleet, they do not call on you or the Coast Guard for any collaboration with respect to vessels in drydock or under examination at all?

Admiral SHEPHEARD. No, sir. That is not the usual procedure. We are available to render them assistance, should they seek it. If they desire to have our records kept up to date as to the vessels drydocking, we would do so.

The CHAIRMAN. Thank you.

Mr. CASEY. Are you familiar, Admiral, with the specifications required in foreign ships as well as our own ships, as far as safety is concerned?

Admiral SHEPHEARD. I have a fairly good idea of the comparison, yes.

Mr. CASEY. Are our specifications more stringent?

Admiral SHEPHEARD. There is no question but that they are more stringent. They are the highest, as you have often heard stated, the highest standards of any maritime nation.

Mr. CASEY. Have they changed considerably in the last 15 or 20 years?

Admiral SHEPHEARD. It is during that period that the major changes have been made.

Mr. CASEY. Is fireproofing one of the major changes?

Admiral SHEPHEARD. That is correct. We are probably 20 years ahead of the world on that item alone.

Mr. CASEY. And every vessel now that is constructed or reconstructed must meet the Coast Guard specifications as far as fireproofing is concerned.

Admiral SHEPHEARD. That is correct, sir. It is a practical impossibility to burn an American ship up that has been built in the last several years.

Mr. CASEY. That all stems from——

Admiral SHEPHEARD. Other than from the cargo, of course.

Mr. CASEY. That started with the *Morro Castle* disaster, did it not?

Admiral SHEPHEARD. That is right.

Mr. CASEY. Do you have any idea of the relative cost as far as specifications are concerned between foreign and domestic? What I am driving at is the construction of ships with Government aid through the Maritime Administration, whether they coordinate with the Coast Guard so far as the relative cost of building a ship to American specifications or foreign specifications?

Admiral SHEPHEARD. No. We have not even had discussions in that respect. Oftentimes it is asked do our high requirements result in greater costs for the American ships. Well, one or two principal items, features that make the American ship so outstanding, are subdivisions. One such is watertight compartmentation. That is a feature that enables a vessel to have possible survival in the case of collision or hitting a mine, or something of that sort. That is very costly and our standards exceed those of foreign ships to a very great extent. This country is the only one that insists that our passenger vessels be constructed of fire-resistant materials. It is quite obvious that it does cost more. What amount it does cost, I am sure I am not in a position to say.

Mr. CASEY. Are there not a lot of other details on the ship, such as ratproofing and things, that are minute details that the Coast Guard requires as far as American ships are concerned which are not required in foreign ships?

Admiral SHEPHEARD. Ratproofing is not administered by the Coast Guard. That is a requirement of the Public Health Service. For-

tunately, ratproofing and fireproofing are quite alike. The Public Health Service has stated that it is so close that it might be even called identical. In other words, you have a draft stop behind, an overhead ceiling, or a panelling, and it likewise prevents the movement of vermin. In addition to that, the fireproofing material does not harbor vermin the way wood does. Our ships are not only safer, but they are by far much cleaner than the foreign ships on that score.

Mr. CASEY. Are the foreign passenger ships still way behind us in fireproofing?

Admiral SHEPHEARD. Yes; they are. We have been doing this fireproofing for almost 20 years. We have improved considerably during that period. It has only been recently that Johns-Manville has set up a plant on foreign soil to manufacture this type of equipment. There is indication that it might be found in foreign ships before many more years. But we are, therefore, 20 years ahead of them, because they certainly are not going to tie up all of the ships that are not so constructed any more than we did. We do have a few of the ships still afloat that were not built of that fireproof material.

Mr. CASEY. Have you had occasion to see some of the newer foreign passenger ships?

Admiral SHEPHEARD. No; I have not.

Mr. CASEY. Thank you very much.

The CHAIRMAN. Do I understand that the foreign luxury liners, the passenger vessels, are susceptible to catastrophe by fire?

Admiral SHEPHEARD. Yes, sir.

The CHAIRMAN. Any questions?

Mr. Allen?

Mr. ALLEN. Admiral, you mentioned a load line. I have always been curious as to how you fix the load line of a ship.

Admiral SHEPHEARD. There was an international convention in 1930 that established the regulations, the proposed regulations, for load lines. It was the first law that was applicable to American ships. That was the basis for the first law. Prior to that, of course, we go back to, I think, around 1870, when Lord Plimsoll had the Plimsoll mark put on British ships, and then the classification societies came into being. They do the assigning. We actually do not assign the load line ourselves; that is, within the Coast Guard. We utilize the American Bureau of Shipping, which is a classification society.

The Congress itself had made the American Bureau the assigning authority for us. We do not relinquish our responsibility, however, to the American Bureau, and their calculations and plans are submitted to the Coast Guard. It is through our technical division that a check is made.

Mr. ALLEN. Is it a matter of mathematical computation, or is it a matter of testing the ship?

Admiral SHEPHEARD. Yes; it is mathematical computation, but really the basis of it is on years of experience.

Mr. ALLEN. What is the theory, to keep a certain amount of free board so that the ship can roll around and still not take water? What is the underlying reason?

Admiral SHEPHEARD. There are various ways. It might be like a 5-ton truck. If you put 10 tons on a 5-ton truck, it may not be suitable. One of the aims, of course, in assigning load line is to provide a safe working platform. That is, to have the ship high enough

out of the water so that the men can work safely as well as protecting the deck fittings, the cargo hatches, and the like.

Mr. ALLEN. You mentioned that casualties are part of your duties to avoid, I guess. What is the casualty record of the last few years? What major disaster, if any, have we had?

Admiral SHEPHEARD. The last 2 years?

Mr. ALLEN. The last few years.

Admiral SHEPHEARD. I might say that in the last 10 years—well, about 10 years ago was the last serious casualty we had to a passenger ship. That was the *Yukon* and 9 passengers were lost when they were trying to get them ashore up in Alaska. One other passenger has been lost in that 10-year period, and that was on the *Flying Enterprise*. It is quite likely it was a heart attack. There were 10 passenger lives lost in the last 10 years, 9 or 10 years.

Mr. ALLEN. It is a rather remarkable safety record, I think. The committee should compliment you on your part in it.

Admiral SHEPHEARD. Thank you, sir. I wish I could say the same as far as the cargo ships are concerned. We have had a couple of very serious casualties during the past year.

Mr. ALLEN. If there are any usual causes, what is the most usual?

Admiral SHEPHEARD. There are no usual. These were quite unusual. One was the *Mormackite* which capsized, and 37 men were lost. The second was the *Southern Districts*, which was an LST. It was never intended for commercial service, but in an attempt to find use for wartime craft we went along with their use. Now we have taken very drastic action insofar as LST's on limited coastwise routes. We don't know what caused the loss of the *Southern Districts*. We do believe in both cases, however, if they had notified the Coast Guard of their difficulties in time, that the loss of life would have been minimized.

Mr. ALLEN. In connection with licensing personnel, could you give us an approximation of the average, if there is one, of the ages of masters and first officers, and also chief engineers?

Admiral SHEPHEARD. That would be rather difficult. There are many licenses held by men who are not serving, but the licenses are still current.

Mr. ALLEN. I was thinking more of the people actually working regularly, following the sea as a profession.

Admiral SHEPHEARD. I would only be a guess if I did mention it. I think it has come down quite a good deal since before the war, sir. Everything may be as relative and they appear younger. That might be it, too.

Mr. ALLEN. They are not staying with the sea as long as they did formerly?

Admiral SHEPHEARD. I would not know how to answer that, sir.

Mr. ALLEN. Thank you, Mr. Chairman.

The CHAIRMAN. You may proceed, Admiral.

What is the National Appeal Board, Admiral?

Admiral SHEPHEARD. We do have a security check on all seamen these days, and their documents must be validated to indicate that they have been checked for their former affiliations with subversive organizations and the like. There are appeal boards set up in various parts of the country that hear these men appeal, and then there is a National Appeal Board here in Washington.

The CHAIRMAN. Who are the members of the National Appeal Board?

Admiral SHEPHEARD. I will ask Captain Craik to answer that.

Admiral RICHMOND. Mr. Chairman, this National Appeal Board is part of the port security program that was discussed yesterday. I just wanted to tie it into the merchant marine safety aspect.

The CHAIRMAN. Did we get this information into the record?

Admiral RICHMOND. You did not ask questions about the appeal board. I think Captain Craik can answer specifically.

The CHAIRMAN. Your full name, sir, and background?

STATEMENT OF CAPT. JAMES D. CRAIK, CHIEF, MERCHANT VESSEL PERSONNEL DIVISION, UNITED STATES COAST GUARD

Captain CRAIK. My name is Capt. James D. Craik. I am Chief of Merchant Vessel Personnel Division, under the Office of Merchant Marine Safety. Concerning the local appeal boards in each port, their composition consists of a Government man who is a civil-service hearing examiner. Then they consist of 1 representative from labor and 1 representative from management. It is a three-man board. They make their recommendations to the Commandant. If, after their screening, the man is still placed in the rejected category, he has a right to the National Appeal Board. The National Appeal Board is of similar composition, 1 man from labor, and 1 man from management, and 1 Coast Guard officer.

The CHAIRMAN. That is the National Appeal Board?

Captain CRAIK. That is the National Appeal Board; yes, sir.

The CHAIRMAN. It is the same as the local board?

Captain CRAIK. Yes, sir.

Mr. CASEY. What is the criteria that has been set up in judging on the security aspect of a seaman?

Captain CRAIK. We have a document called Security Regulations on Waterfront Facilities which contains that information, sir.

Mr. CASEY. Is there a question of loyalty, of communism, or is it a matter of character and other things?

Captain CRAIK. As far as seamen are concerned, it is straight subversive acts and the recency of those subversive acts.

Mr. CASEY. The recency of them?

Captain CRAIK. Yes, sir.

Mr. CASEY. In other words, it is possible that a fellow was a Communist back in 1939 or 1940 and you might still give him a security card today?

Captain CRAIK. Yes, sir.

Mr. CASEY. How recent do the acts have to be?

Captain CRAIK. That all depends, sir, on the type or depth you might say of the association with Communist activities. To say just how recent would be rather difficult.

Mr. CASEY. But there is no relationship between this security program and the security program set up for Government employees where other things are involved, for example, their morality, and sobriety, and things such as that coming into the picture?

Captain CRAIK. For the longshoremen, other things are involved there, such as narcotics. But as far as the seamen, since we have Revised Statute 4450, to take care of the normal acts of misconduct, it is straight subversive activity, as far as seamen are concerned.

Mr. CASEY. But you do go further as far as longshoremen are concerned?

Captain CRAIK. As outlined in the regulations there; yes, sir.

Mr. CASEY. Does this appeal board apply to longshoremen as well as seamen?

Captain CRAIK. Yes, sir.

Mr. CASEY. Are all seamen required to receive a security clearance before they board an American-flag ship?

Captain CRAIK. All seamen today, sir, are required to have a validated document for emergency service.

Mr. CASEY. Is that true of longshoremen?

Captain CRAIK. All longshoremen working in restricted areas must have a port security card, it is a similar type of identification card, validated for emergency service.

Mr. CASEY. You say the criteria are a little different for longshoremen? In other words, he has to pass a more rigid test to get the card?

Captain CRAIK. Yes, sir. There is no Revised Statute 4450 applicable for the longshoremen such as we have for the seamen.

Mr. CASEY. As far as longshoremen are concerned, it only applies when they are working in a restricted area?

Captain CRAIK. Yes, sir.

Mr. CASEY. That is, on some military dock?

Captain CRAIK. A restricted area for the carrying of, perhaps, military cargoes or certain types of explosives. It must be a restricted area as categorized by the Coast Guard, where they are required. But with the voluntary program that is going on, we, of course, have a majority of the longshoremen being screened.

Mr. CASEY. A majority are screened?

Captain CRAIK. Yes, sir.

Mr. CASEY. Is that a purely voluntary act on the part of the longshoremen?

Captain CRAIK. Yes, sir.

Mr. CASEY. In other words, there is no requirement for longshoremen working commercial cargo to be screened or to receive a security card?

Captain CRAIK. No, sir.

Mr. CASEY. Do you have any idea of the percentage of longshoremen in the United States who have been cleared?

Captain CRAIK. Who have not been cleared?

Mr. CASEY. Who have been cleared.

Captain CRAIK. I don't have those exact statistics. I have the statistics on seamen, but I do not have the statistics on longshoremen, because normally the original handling of the longshoremen is in another division of Coast Guard headquarters.

Admiral RICHMOND. Mr. Chairman, I testified before the committee with Senator Humphrey last week on this subject. With respect to the question about longshoremen, as Captain Craik has indicated, this port security card is a condition precedent to employment in a restricted area. Therefore, it is not specifically a requirement for employment as a waterfront worker. The figures that we have with respect to waterfront workers include, in addition to longshoremen as such, a great many people who frequent the waterfront. So the figures I gave may include more than longshoremen. We have

cleared, and this is an approximate figure, about 370,000 waterfront workers, which includes, in some cases, fishermen as well as others. But not all stevedores have necessarily requested a port security card. There is one organization on the west coast that almost in entirety have refused to seek a card.

Mr. CASEY. What organization is that?

Admiral RICHMOND. I don't know the exact name of the union. It is one headed up by Harry Bridges.

Mr. CASEY. That is the whole west coast with the exception of Seattle?

Admiral RICHMOND. That is practically it. But there is actually another organization out there of waterfront workers that have that clearance.

Mr. CASEY. I was led to believe when I was out on the west coast recently that a great percentage of longshoremen have received security cards.

Admiral RICHMOND. I think the greater majority have, that is correct.

Mr. CASEY. I was led to believe that they were members of the ILWU, which is headed by Harry Bridges.

Admiral RICHMOND. I think, sir, there are a number of them, but officially the union has frowned upon it.

Mr. CASEY. Do you also have occasion from time to time to grant security cards to others than merely the longshoremen, that is, the officials of the union or the heads of the stevedoring companies?

Admiral RICHMOND. That is correct.

Mr. CASEY. That is, if they apply?

Admiral RICHMOND. If they apply.

Mr. CASEY. And you have had occasion from time to time to refuse security cards to some of these people, have you not?

Admiral RICHMOND. We have.

Mr. CASEY. And the heads of some of these unions?

Admiral RICHMOND. I can't answer specifically whether any union head has been refused a card.

Mr. CASEY. Is there some real reason why the criteria for passing on longshoremen is different from the criteria on seamen?

Admiral RICHMOND. It is only different to this extent, that we include for waterfront workers conviction of certain crimes, such as arson which, in our opinion, and that, incidentally, is covered in your regulations there, would make that individual a potential security risk if working on the dock. Arson, drunkenness, that is, continued drunkenness, narcotics, and there is one other offense. That is really the only basic difference in the matter of screening.

Mr. CASEY. How about larceny?

Admiral RICHMOND. Larceny is not, because it is not the opinion of the Coast Guard that larceny, per se, goes to the security of the dock, sir.

Mr. CASEY. But seamen that were convicted of those crimes could nevertheless receive security cards as long as they are not Communists?

Admiral RICHMOND. The seamen?

Mr. CASEY. Yes.

Admiral RICHMOND. If a seaman were found guilty of larceny while serving under his certificate, he could be proceeded against under our hearing procedure which Captain Craik has mentioned, under R. S. 4450.

Mr. CASEY. But that has nothing to do with the security-card program?

Admiral RICHMOND. That is right. He would not be denied the validation on the basis of larceny.

Mr. CASEY. Captain, you said you had the statistics on seamen, but I assume that the statistics are that there is a hundred percent of all seamen that sail the seas on American flagships that have received security clearance?

Captain CRAIK. We have screened 405,161 seamen, and of those who are still in the denial status, there are 1,867.

Mr. CASEY. Have you found any occasion where seamen who were denied security cards have wound up as longshoremen?

Captain CRAIK. Not to my knowledge, no, sir.

Mr. CASEY. Would you have a way of knowing if that happened?

Admiral RICHMOND. Not necessarily. Well, the only way you would know is if they applied for a port-security card. Of course they would be denied the port-security card in the same way that they had been denied the validation.

Mr. CASEY. Do you have any views, Admiral, as to whether or not port-security cards should be required of all longshoremen, whether they are working military or commercial cargo?

Admiral RICHMOND. We do not believe it is a requisite at the present time. As a matter of fact, the port-security card does not have too much requirement right now because there are relatively few restricted areas. The restricted area idea was a development of the port-security program to cover, as Captain Craik has said, either military cargoes or MDAP cargoes going overseas in 1950–51. They were not ordinarily permanent areas. By that I mean, if a ship were tied up at a particular dock and loading MDAP cargo, the pier might be for 24 or 48 hours declared restricted for the loading of that cargo. Then once that cargo was out, and normal commerce was crossing the pier, that would be the end of the restriction.

New York, to my knowledge, was the only place that set up permanent restricted areas. Today, with the reduction in the Far East problem, as a result of the situation in Korea, this is not too active, and the main accomplishment of the screening program is that we do have this number of waterfront workers who have been cleared. But I don't think that what you suggest would be productive unless you were prepared to restrict the entire waterfront, which I do not believe the United States is presently ready to do, sir.

Furthermore, when you restrict, you must remember that at the same time you restrict, you are going to have to carry along with it the process of policing those areas to see that noncleared people are kept out.

Again, I don't think that, as a national matter, we are prepared to undertake that restriction at the present time.

Mr. CASEY. Is it left to the particular port commander to insist upon the display of these security cards from the longshoremen as they appear on the dock?

Admiral RICHMOND. It is left to the district commander and his port-security officers to decide what areas shall be restricted; yes, sir.

Mr. CASEY. Is it not a fact that these security cards have been waived from time to time, if a fellow appears and does not have one,

that they waive the requirement for a security card in a restricted area?

Admiral RICHMOND. It has been waived to this extent, that where we actually have a group around and a man appears who does not have a port-security card, or a validated document giving him clearance, that he can be given a special permit to enter the area, depending upon the judgment of the on-the-scene commander of the port there. If he feels that this person has legitimate business, and he, in turn, does not want to interfere with him, and yet keep him under surveillance, he can assign somebody to go with the man.

In addition to that, in cases where there is no obvious reason to eliminate a waterfront worker who makes application, we give him a temporary pass until that can be cleared, unless there is some showing that they should be barred.

Mr. CASEY. Do you conduct a full field investigation of these people?

Admiral RICHMOND. We do not. It is a national name check.

Mr. CASEY. It is just a record check?

Admiral RICHMOND. As I told you, Mr. Chairman, Admiral Shepheard has to appear before the Senate committee. He can be back tomorrow, if you wish, to answer any questions with respect to marine matters.

Mr. CASEY. Perhaps you better continue. How long do you have here?

Admiral SHEPHEARD. I am due at the Senate committee at 11 o'clock.

Mr. CASEY. Do you have much more to continue in your own way?

Admiral SHEPHEARD. No, but I would like to make one other statement. That is that I am afraid I might have misled you when I was giving some statistics. I intended to go a little further and did not have the opportunity. I was referring to ocean and coastwise passenger vessels, when I mentioned there were 11 in the last 10 years that were lost. We have had serious casualties in small craft, those small craft that go out for a day's fishing, like the *Pelican* up at Long Island where forty-odd people were lost on a Sunday's fishing excursion. There are a number of cases of that sort. However, the Coast Guard has very little jurisdiction over the seaworthiness of that type of craft.

The CHAIRMAN. Before you go, Admiral, I understood that this hearing in the Senate had something to do with this subject we are discussing now; is that correct?

Admiral SHEPHEARD. That is correct, sir.

The CHAIRMAN. What is the title of the hearing?

Admiral SHEPHEARD. The law today requires a ship to be inspected every year, an annual inspection. This is a proposal that cargo ships and miscellaneous type vessels which we now inspect annually be inspected every 2 years.

The CHAIRMAN. That does not have anything to do with personnel or the security of the personnel?

Admiral SHEPHEARD. No, none whatsoever, sir.

The CHAIRMAN. Thank you.

I would like to ask Captain Craik a question. Would you give an example, Captain, of just what you do with respect to a seaman that you suspect is a Communist on a ship?

Captain CRAIK. We get an application in the field for a validated document first, or suppose we get an application in the field for an

original seamen's document. When we get that application at Coast Guard headquarters, depending upon whether the man is an alien or an American, if he is an American his application goes to the FBI, and if he is an alien, it goes to many agencies for what we call a central agency check.

The information that we get back from those intelligence agencies is then screened by an evaluation board at Coast Guard headquarters. If the evaluation board decides that this man has the potentiality of being a risk, as far as a seaman goes, or he has been associated or has attended meetings of various Communist affiliations, then he is placed on the rejected list and so informed by letter, and he is also told of his rights to appeal before the local appeal board and the national appeal board.

In the fall of 1953 there was a test case brought to court on the west coast, and Judge Murphy at that time stated that as far as the security methods were concerned we would have to have more specificity in our letter of rejection, and we would have to supply the individual with a bill of particulars to the particular acts that we are considering in his case. Since that time, the decision of Judge Murphy, his decree, we have been complying with that in our security regulations.

The CHAIRMAN. Over the past year, those that you have declined to issue a certificate to based on this question, and on which your board has had a hearing, how many declinations have been sustained and how many have been overridden?

Captain CRAIK. We also gave those who were rejected originally, even having gone through the national appeals board before Judge Murphy's decree, an opportunity to start again at the local appeal board level to be heard in their particular case, and furnishing them with a bill of particulars if they so requested to go ahead.

In our statistics on the seamen, I do not have that particular item outlined but I have denied initially with the institution of this program 3,121.

The CHAIRMAN. When was the program initiated?

Captain CRAIK. In the latter portion of 1950, sir. It was originally initiated by an agreement between labor, management, and the Government. Later the Executive Order 10173 put teeth into it.

The CHAIRMAN. In 1950?

Captain CRAIK. That is right. Of the number denied originally, I said there were 3,121. Shall I read all these statistics?

The CHAIRMAN. I asked you the question: How many declinations have been sustained and how many have been overridden?

Captain CRAIK. Well, we may say the number that have been sustained of those remaining at present in the denial status, and that would be 1,867.

The CHAIRMAN. That is out of 3,000?

Captain CRAIK. Out of 3,121 originally rejected; yes, sir.

The CHAIRMAN. One thousand sustained, then, and 2,000 have been cleared?

Admiral RICHMOND. You have some cases pending.

Captain CRAIK. There are 125 in the denial status still pending.

The CHAIRMAN. And this judicial decision was rendered on what date?

Captain CRAIK. In October 1953, sir.

The CHAIRMAN. 1953?

Captain CRAIK. Yes, sir.

The CHAIRMAN. You now have conformed with that?

Captain CRAIK. Yes, sir.

The CHAIRMAN. That decree was that you are required to show all of the conduct of the man, his affiliation, and whom you get the information from and so forth?

Captain CRAIK. In the bill of particulars, we cannot say who we get the information from, or what source the information came to us. But the bill of particulars would read, such as item 1, "You were a member of the Communist Party in 1946 and 1947." That might be one item in the bill of particulars.

Mr. THOMPSON. Is a man ever privileged to face his accuser?

Admiral RICHMOND. No, sir. May I answer that? The bill, an act, was a bill to enjoin the carrying out of this provision on two bases: One, lack of confrontation and cross-examination, that it denied the due-process provision; and, secondly, that a man should not be denied the right to work pending the outcome of the hearing. Judge Murphy denied both requests under the injunction on the ground that confrontation and cross-examination were all criminal procedures and not a matter of this type. And, secondly, insofar as the matter of the question of seeking employment or carrying on employment, pending a hearing, that in cases of less public necessity than this, the administrative action was proper without the necessity of a hearing.

He did, as Captain Craik indicated, however, feel that up to that time we had not been giving the people sufficient particulars as to why they were being denied. Since that time, we have amended our procedure.

Furthermore, this has been sustained, or I think we can say that the constitutionality of the Magnuson Act under which this is based and the legality of the administrative process has been sustained, additionally by a case which arose in Seattle where it was an action by the Government against two men who sought employment without having validated documents. In that case, it was carried to the Ninth Circuit Court of Appeals, but we lost it again on the ground, the Government lost the case on the ground, that these men had not been given sufficient particulars, and the court in its language upheld the procedures otherwise.

Mr. THOMPSON. Is there any specified period of time in which an appeal must be acted upon, both by the local board and the National Board?

Admiral RICHMOND. Do you mean as far as the board meeting, or as far as filing?

Mr. THOMPSON. I am thinking of a case where a man possibly has been accused of being a Communist, and is unable to pursue any line of work in the interim. How long do you keep him in abeyance, so to speak. Is there a limitation on time?

Admiral RICHMOND. There is no limitation. Of course the Board acts as rapidly as it can. That would fluctuate with the number of appeals performed. Much would depend on the way in which the individual presents his case, and when he presents himself. He does not have to present himself; he can file a brief. You have all sorts of delaying factors in the thing.

In addition to that, if, for any reason he challenges a member on the panel—there are also public members who are usually attorneys of

stature in the community—you may have the delay of having to bring in a new member on to the Board. As I say, this panel is made up, as Captain Craik has said, of a Coast Guard representative in the sense of this civil service examiner, and members of management, and members of the labor branch, as well as the public members. So you have that delay of getting a Board. We usually try, where a labor man is involved, to get the labor representative from the man's particular union, on the Board.

Mr. THOMPSON. Have you ever had cases where a man was accused by an accuser and found through your Board action that the accuser, through capriciousness had made these charges and they were unfounded?

Admiral RICHMOND. I can't answer that specifically, sir, because we have had a number of cases. I don't believe so, because the accuser does not appear before our Board. This is largely a matter of record of name check. As Captain Craik has said, when the derogatory information comes back to us from the FBI, then we have an evaluation board to evaluate to see whether we should give credence to that or not.

Mr. THOMPSON. The FBI clears these charges and either validates them or invalidates them prior to a board hearing?

Captain CRAIK. The FBI in a sense makes no recommendations. They give us the investigatory report. The evaluation of that report must be made within our own agency.

Mr. THOMPSON. I mean the evaluation as to the accuracy of an accuser's statement?

Captain CRAIK. The evaluation as to the accuracy or reliability of the informer is stated.

Mr. THOMPSON. And the FBI makes that recommendation?

Captain CRAIK. It is not a recommendation; it is a statement.

Mr. THOMPSON. That is all. Thank you.

The CHAIRMAN. Any other questions?

Mr. PELLY. Mr. Chairman?

The CHAIRMAN. Mr. Pelly.

Mr. PELLY. It seems to me that 2 or 3 years ago I had a complaint from some of the stevedores that they could get a port-security card from the Coast Guard and yet they not be permitted to work at the port of embarkation because they could not get clearance from the Navy, and that there were at least two separate security cards or clearances that they had to get.

Admiral RICHMOND. That is entirely correct, sir. This port-security card does not have to be accepted by any other governmental group, such, as you say, a port of embarkation. On the west coast, generally, and I think I am correct in this, on the west coast the Army port of embarkation has accepted our port-security card, either issuing their card on top of it or, in some cases, accepting our port-security card. There was, several years ago, some question on the Columbia River about an ammunition-loading port, whether the Army would accept our cards there. It is quite within the province of any commanding officer of that type of installation to set up his own requirements for the security of his particular command.

Mr. PELLY. Is there any integration in obtaining information between the various services?

Admiral RICHMOND. Yes. They know exactly what we are doing.

Mr. PELLY. It is just a matter of evaluation, then?

Admiral RICHMOND. It is a matter of evaluation.

Mr. PELLY. Have there been many complaints of that nature lately?

Admiral RICHMOND. No. I think there have been very few. We have no right to insist, in other words, that they accept our evaluation any more than we could for any employer to accept it.

Mr. PELLY. Thank you.

Mr. THOMPSON. May I ask one more question in that connection?

The CHAIRMAN. Yes.

Mr. THOMPSON. Is there a duplication of effort, then, in going into the background of the individuals on the application for the two types of security clearances?

Admiral RICHMOND. I do not think so, sir, because we do not make any field check. We depend on the agencies that have this intelligence information for our basic information.

Mr. THOMPSON. You would not recommend, then, that a common security clearance board be used for all services?

Admiral RICHMOND. I do not believe so, sir, because we might very easily evaluate a waterfront worker on an entirely different basis than, say, the commanding officer of embarkation.

Mr. THOMPSON. This common board would allow you to give it your criteria for clearance, then react on your men that way, and then give it various degrees of clearances for other services.

Admiral RICHMOND. You might have a commanding officer, returning to Mr. Casey's question of larceny, where we might have given the man a security card and yet this fellow has a record of larceny, and the commanding officer just does not want to have that stevedore or waterfront worker employed on his unit because of that past record of larceny.

Mr. THOMPSON. But if there could be established various degrees of security clearances, and you could select those from the categories for which individuals have been cleared, you would not have a duplication of effort in checking the background then.

Admiral RICHMOND. I realize in explaining this we have made it sound rather complicated. I don't believe there is the overlap that appears, actually. I am not sure that putting it all in one pool would be a gain.

Mr. THOMPSON. That is all.

The CHAIRMAN. Does this conclude the testimony, then, of Admiral Shepheard?

Admiral RICHMOND. It does, sir, and I presume the committee would like to have Admiral Shepheard back tomorrow?

The CHAIRMAN. I said, Does this conclude his testimony?

Admiral RICHMOND. It is a question of whether the committee wants to ask additional questions on the Office of Merchant Marine Safety. Let us say, sir, that it concludes his testimony and I will have Admiral Shepheard here tomorrow morning in case the committee has any questions they wish to direct to him.

The CHAIRMAN. Did you finish the various departments of his agency?

Admiral RICHMOND. Yes, sir. As he indicated, there are three divisions.

The CHAIRMAN. He has gone over them?

Admiral RICHMOND. Yes, sir.

The CHAIRMAN. All right. Thank you.

Admiral RICHMOND. The next witness is Admiral Kenner, Chief of the Office of Personnel at headquarters.

STATEMENT OF REAR ADM. WILLIAM W. KENNER, CHIEF, OFFICE OF PERSONNEL, UNITED STATES COAST GUARD

The CHAIRMAN. Admiral, would you give your full name and background?

Admiral KENNER. I am Rear Adm. William W. Kenner, Chief, Office of Personnel.

Mr. Chairman, members of the committee, with your permission, I will give a brief résumé of the activities of the Office of Personnel, its organization and the programs that it administers, and our status as of today.

The Office of Personnel has the function of directing, supervising and coordinating all phases of personnel in the service, military and civilian. The major tasks are; one, procurement of officers, enlisted men and civilian employees; two, planning and directing the necessary training programs; three, assignment of officers and distribution of enlisted men in a manner obtaining the maximum of efficiency of operations; four, provide medical and morale services; five, effect discharges, retirements, separations; six, administration of the funds allotted personnel to man the units of the service; seven, administration of the Reserve and auxiliary programs.

To carry out these functions, the Office of Personnel is divided into divisions, each with a specific mission pertaining to some phase of personnel activity.

The Auxiliary Division develops and administers the program for the Coast Guard Auxiliary.

The Civilian Personnel Division develops and conducts the program for the administration of civilian personnel in the Coast Guard, subject to the limitations prescribed by law and the rules and regulations of the Civil Service Commission and the Treasury Department.

The Enlisted Personnel Division is responsible for assignment, advancement, discharge, and retirement of enlisted personnel, and maintaining the comprehensive records in connection therewith.

The Medical Division plans and administers all matters pertaining to the health of the military personnel, including medical and dental examinations.

The Officer Personnel Division administers the officer personnel program, except for such elements as are specifically assigned to other divisions; for example, procurement, training and medical care.

The Reserve Division develops and administers the program of the Coast Guard Reserve.

The Special Service Division administers the elements of the military personnel program which pertain to the well-being and morale of the individual and his dependents.

I might at this point elaborate on the duties of that Division a little more. It supervises the provision and assures the adequacy of recreational athletic materials and activities; prepares for the Coast Guard exchanges; prescribes articles and services to be sold; reviews records of all exchanges; reviews all boards and reports where it

appears that in the performance of duty by military and civilian personnel there may have been inefficiency, neglect or dereliction or grounds for commendatory action; analy es all boards and reports pertaining to moral implications; reviews all reports as to severity and appropriateness of sentences and makes appropriate recommendations; reviews all recommendations for medicals, commendations and awards; prepares information relative to civil readjustment, military service benefits, voting rights and State bonus information; maintains records of casualties; arranges notification of next-of-kin in event of casualty; assists next-of-kin in collection of death gratuities, final pay; issues necessary directions regarding funerals in the field; performs administrative functions in connection with Government and national service life insurance programs, assisting personnel in maintenance of insurance programs.

As you can see, gentlemen, that division has quite a task for the well-being and morale of the officers and men.

In the utilization of our personnel, the total strength of the service as of the 15th of March 1955, was as follows: Military, officers, 2,574; warrant officers, 869; enlisted men, 23,876; a grand total of 27,419.

We had on board 1,988 classified civilian employees, 2,395 wage board, and miscellaneous 654. These miscellaneous are your lighthouse keepers, light attendants, and also appeal board members. Grand total in the service 32,456.

Of interest to some of you may be the distribution of personnel between the districts. The first district, with its headquarters at Boston, has a total of 3,682. The second district, 427. This is military personnel, by billets. The third district, 3,067.

The CHAIRMAN. Let the record show where those districts are, if you please.

Admiral KENNER. Yes, sir. The second district is St. Louis. That is pretty much the center of the country. The third district, headquarters, New York. The 5th district, Norfolk, 2,328; the 7th district, Miami, 1,676; 8th district, New Orleans, 1,462; the 9th district, Cleveland, 1,928; the 11th district, Long Beach, 860; 12th district, San Francisco, 1,437; the 13th district, Seattle, 1,865; the 14th district, Honolulu, 1,606; the 17th district, Juneau, 913.

The headquarters units, comprising your training stations and certain port activities, 1,745. Your total there, distributed in those billets, and these are all operating billets, 22,996. We are allowed for training and ineffectives, 2,173.

It may be of interest to give you the distribution totals by functional programs, servicewide. One, in our operational units for aids to navigation, and this includes fog signal stations, light attendant stations, radio beacon stations, tenders, buoy boats and light ships, 190 commissioned officers, 185 warrant officers, 4,865 men. A part of the aids to navigation system, the loran stations, 36 officers and 572 men. For search and rescue operations, operational units, including air stations, air detachments, planes, lifeboat stations, ice breakers, miscellaneous tugs, and ocean station vessels, 797 officers, 226 warrant officers, 10,767 men. Our port security operational units, 110 officers, 18 warrant officers, 872 enlisted men, merchant marine safety units, 480 officers, 36 warrant officers, 198 enlisted men.

Our support units, which includes all units for maintenance, repair, operational commands, supply, training, administration, 1,046 officers, 423 warrant officers, 7,694 men.

The third item is training and procurement. Officers, commissioned officers for the service are acquired from four sources, the Coast Guard Academy, the merchant marine, officer candidate program, and the Coast Guard Reserve.

We will deal with the Academy first. The present enrollment of cadets is approximately 420. The cadets are selected from candidates participating each year in a nationwide competitive examination. The average entering class numbers 200. Of these about 80 are expected to graduate and become commissioned officers. The course is 4 years, with college level studies combined with these professional training in education afloat and ashore.

The quality of applicants for the Coast Guard Academy is adequate to meet the needs of the service, and the required number of appointments have been made over the years consistent with high selective standards. However, it has become increasingly difficult to obtain both the quantity and quality of applicants desired due to indications of general disinterest in service careers. This is particularly so among the potential applicant source that can be classified as the outstanding group. The keen competition between all service academies and civilian colleges and universities, attractiveness of the ROTC-type programs, and the attractive material awards offered by private industry are the primary causes for the current difficulties in obtaining the best qualified applicants from among the potential sources. However, considerable effort has been put forth during the past year to publicize the Coast Guard and its Academy. A vigorous prosecution of this program has enabled the Coast Guard to show a slight increase in the number of applicants processed for the current competitive examination. 1,617 applications were received and processed for the 1955 examination, which is an increase of 7 percent over the previous year.

From among these applications, 200 candidates, will be selected and appointed as cadets. Under title 14, United States Code——

The CHAIRMAN. Admiral, I regret very much to interrupt you. It is my intention to conclude these hearings tomorrow. I hope you will bear with us. There is a rollcall in the House. We will meet tomorrow morning at 10 o'clock and resume with your statement, and then we will have Admiral Cowart. That will conclude the Coast Guard hearings. We will take you at 10:30. The committee will meet at 10 o'clock for an executive session to receive a report from Mr. Casey and Mr. Drewry, and such other matters as may be necessary to take up with the committee in executive session.

Now the committee will stand in recess until 10 o'clock tomorrow morning, and you, Admiral, will come at 10:30.

(Whereupon, at 11:18 a. m., the hearing was recessed, to reconvene at 10 a. m. Friday, March 25, 1955.)

STUDY OF THE OPERATIONS OF THE UNITED STATES COAST GUARD

FRIDAY, MARCH 25, 1955

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D. C.

The committee met at 10 a. m., pursuant to notice, in room 219, Old House Office Building, Hon. Edward J. Robeson, Jr., presiding.

Mr. ROBESON. The committee will come to order.

Admiral, you may resume.

STATEMENT OF REAR ADM. WILLIAM W. KENNER, CHIEF, OFFICE OF PERSONNEL, UNITED STATES COAST GUARD—Resumed

Mr. CASEY. You were not finished yesterday, Admiral?

Admiral KENNER. No, sir, I did not finish. I will pickup just a little before where I left off, procurement and training, and repeat the brief on the Academy, with the chairman's permission.

Mr. CASEY. Before you get started, Admiral, I think you said you took the 200 candidates a year in the Coast Guard Academy, and only 80 graduated. Is the casualty rate that great in the Academy?

Admiral KENNER. Yes, sir.

Mr. CASEY. What do they do, flunk out?

Admiral KENNER. They flunk out, or are required to resign due to adaptability. The great majority of them fail in studies and cannot keep up with the course.

Mr. CASEY. Does that indicate that you are getting an inferior type of candidate to begin with?

Admiral KENNER. No, sir, not always. In some groups that might be the case. With others, it varies from year to year. Sometimes we get a very high type, and then the next year maybe the level will be a little lower. The course is an engineering course, at college level, and the standard is quite high.

Mr. CASEY. Is not the percentage higher, though, than the percentage of the other service academies?

Admiral KENNER. With the chairman's permission, I will ask Captain Winbeck to answer that question. He is in charge of our procurement and training, and he has those figures, I think.

STATEMENT OF CAPT. ALLEN WINBECK, CHIEF, PROCUREMENT AND TRAINING DIVISION, OFFICE OF PERSONNEL, UNITED STATES COAST GUARD

Mr. CASEY. Can you answer that categorically, Captain?

Captain WINBECK. Will you state the question again, sir?

Mr. CASEY. Is the percentage of failure in the Coast Guard Academy higher than in either of the other service academies?

Captain WINBECK. Yes, sir.

Mr. CASEY. Considerably higher?

Captain WINBECK. I would say by 10 to 15 percent.

Mr. CASEY. Is the course tougher?

Captain WINBECK. I believe the course is tougher, yes, sir.

Mr. CASEY. That is all I have.

Captain WINBECK. I might add, that is true because the Coast Guard Academy has a tougher course, primarily due to the fact that it is an engineering course, and our rate of attrition, I believe, compares very favorably with the engineering schools of the country, the other civil engineering schools of the country.

Mr. CASEY. Like MIT?

Captain WINBECK. Like MIT, Case, and other well-known engineering schools. The percentage of graduates will vary between 40 and 50 percent with the year. It may be 80, it may be 90, it may be 95. But the attrition rate is between, I would say, 45 and 50 percent. And from studies that have been made in comparison with other engineering schools, ours is pretty closely the same. But our attrition is greater than the Naval Academy or the Military Academy.

Mr. CASEY. Thank you.

Mr. ROBESON. Your scholastic acceptance is on examination entirely, is it, or are they accepted from other schools on their record?

Captain WINBECK. No; not on their records.

Mr. ROBESON. It is all examination?

Captain WINBECK. It is all on an examination, a competitive scholastic examination. Anyone may compete if he is a graduate from high school and has the necessary credits and the necessary recommendations.

Mr. ROBESON. The question would come into my mind as to whether your examination determines the fitness.

Captain WINBECK. I believe it does. Do you mean if the examination is determined to fit the curriculum?

Mr. ROBESON. I will put it plainly, that if the examination was tougher, there would not be so many that would start.

Captain WINBECK. The examination, from what I believe, is tougher than at Annapolis, and is tougher than at West Point, and is tougher than the college board. A lot of those that we talk about flunk out. Quite a number resign voluntarily after they arrive at the Academy, because they find out that the service life is not for them. So you have a voluntary resignation and an involuntary resignation category. In the period of 4 years, it amounts to about 45 to 50 percent remaining.

Mr. ROBESON. About what percentage of those flunk out as against other causes?

Captain WINBECK. As against those that voluntarily resign?

Mr. ROBESON. Yes. Just approximately. I know it would vary.

Captain WINBECK. I would say 4 to 1. I mean, 4 will flunk out to 1 that resigns. That is an approximation, if I may say, but a fairly close approximation.

Mr. ROBESON. Thank you.

Admiral KENNER. About 7.5 percent go out voluntarily because they find out they do not care for service life. They generally go in the fourth class year, or what is actually the first year.

Captain WINBECK. Some go the first day they arrive.

Mr. ROBESON. Proceed.

Admiral KENNER. I think we have covered the Academy. I might go back a little ways to refresh memories.

Commissioned officers for the service are acquired from 4 sources: the Academy, the merchant marine, the officer candidate program, and the Coast Guard Reserve. Under title 14——

Mr. CEDERBERG. Mr. Chairman, are we coming back to the Academy again? If not, may I ask one question?

Mr. ROBESON. All right.

Mr. CEDERBERG. I have had a few people ask me, and I would like to get it cleared up, whether or not after graduation from the Academy they are required to render so much service in the Coast Guard.

Admiral KENNER. Yes, sir.

Captain WINBECK. Four years.

Mr. CEDERBERG. They must render 4 years' service. There was some misunderstanding about that, and I wanted to be sure.

Mr. ROBESON. Any other questions?

If not, proceed, Admiral.

Admiral KENNER. Under title 14, United States Code, the Coast Guard is authorized to procure officers for the regular corps from licensed officers of the merchant marine. This source does not produce very many, as the high type of merchant-marine officers desired is not attracted to the service due to the relatively high salary he can obtain in civilian life. Competitive examinations are held each year for qualified applicants.

The officer candidate program: This is a program for college graduates and qualified enlisted personnel. The candidates meeting educational, mental, and physical standards are enlisted in the Coast Guard Reserve and given a 4 months' course of instruction at the Coast Guard Academy. Upon successful completion of the course, they are commissioned as ensigns in the Reserve and commence 3 years active duty, after which they are released from active duty and transferred to the Ready Reserve. This program will provide about 100 junior officers in this fiscal year. To date, the program has produced over 900 new Reserve officers.

Enlisted men of the Regular service graduating from the Officer Candidate School are given temporary service commissions and may, after 3 years, be released from active duty and transferred to the Reserve.

Discussion of the Reserve as a source will be included in a later paragraph on that organization.

The Warrant Officer Corps: The Warrant Officer Corps is almost entirely drawn from qualified senior petty officers of the service with more than 10 years' service. The recent enactment of the Warrant Officer Act makes a warrant officer career more attractive than in the

past. I might add, if the new pay bill goes through the Senate, the warrant officer career will be even more attractive.

There is a correction in there on an inequity in pay between the chief petty officer and the warrant officer, W–1, which in the past has deterred qualified chief petty officers from accepting warrant officer appointment. We hope that will be corrected shortly.

Officer postgraduate training: In addition to training and education all officers receive prior to commissioning, selected officers are assigned to postgraduate training at the Navy postgraduate schools, civilian institutions, and staff schools of other services. Officers are also given specialized training in various fields. Coast Guard aviators receive flight training at Navy flight centers. This year almost 100 officers are so assigned.

Enlisted men: Enlistments in the service are voluntary. The original term of enlistment is for 4 years with reenlistments optional for terms of 2, 3, 4, and 6 years. All men enlisting and who are without prior military service undergo 12 weeks of basic training at 1 of the 2 receiving centers maintained by the Coast Guard. These stations are located at Cape May, N. J., and Alameda, Calif. At present there are approximately 1,600 men taking basic training. Upon completion, they are assigned to the operating units of the service. Petty officer training is conducted at Groton, Conn., in 14 specialties. Total number under training is about 600. Upon successful completion of the course, these men are the potential new petty officers.

In addition, about 150 men are receiving advanced training in various Navy schools in various rates.

You gentlemen have recently heard much about the personnel difficulties being experienced by all the services. We, too, have our problems. The recruitment of personnel on a voluntary enlistment basis during the current fiscal year and the latter part of the previous fiscal year has been difficult both as to quality and as to quantity. This situation is due to the following basic factors: General lack of interest in military careers; material reward not sufficiently attractive compared to salaries offered by private industry; reduced draft calls; lower reenlistment rate among first enlistment expirations that runs about 3 percent; subsequent reenlistments are only 65 to 75 percent; relatively high employment level nationwide; unwillingness among younger applicant potential group to obligate themselves for the longer enlistment period required for voluntary enlistments; keen competition among all the services for volunteer enlistments; and indifference of the general public toward the need for a solid career corps.

To offset these difficulties and to enable the service to obtain sufficient personnel through enlistment processes, the following action has been taken: Increased the number of personnel assigned to recruitment detail by 100; established additional recruiting facilities and assigned additional mobile equipment; reduced certain enlistment qualifying standards both mental and physical; making every effort to improve the general morale of the service to induce a higher enlistment rate; increased recruitment publicity and dissemination of general information concerning Coast Guard operations to the general public.

It will be necessary for the Coast Guard to obtain approximately 6,000 new enlistments during the current fiscal year. As of the 31st of January 1955, 3,751 of these enlistments had been effected. It will be necessary to enlist approximately 3,000 recruits in fiscal 1956 and approximately 5,500 during fiscal 1957. The present moral and mental standards for enlistment in the Regular Coast Guard are considered to be the minimum acceptable. The enactment into law of the new Career Incentive Act will, it is believed, make a great contribution toward alleviating the present unsatisfactory situation.

The Coast Guard Reserve——

Mr. ALLEN. Before you leave that point, why is it that the Coast Guard has, as I understand, a 4-year period of enlistment and the other services have 3? Is there a fundamental reason for that?

Admiral KENNER. The Navy has a 4-year enlistment period and the Air Force has a 4-year enlistment period.

Captain WINBECK. The Marines have three.

Mr. ALLEN. The reason I asked is because someone called me yesterday and wanted to know why it was, because they had a boy that wanted to enlist in something, not as a permanent career for life, but, I suppose, the draft was breathing down his neck. I was wondering why the difference.

Admiral KENNER. A 4-year enlistment period is much more beneficial to us. It reduces the rotation, and particularly in petty-officer rates after we put a lot of money into training a man. We get a more reasonable return for the Government's money.

Mr. ALLEN. I see the advantage if you get the men. But I was wondering whether that was a stumbling block sufficient to warrant further consideration.

Admiral KENNER. Well, it may be. I think for this month we are pretty near to our recruiting quota.

Captain WINBECK. We would get our men easier with a 2- or 3-year enlistment, and faster. But we have been receiving enough enlistments with the 4-year contract. It has taken a lot of hard work to do it, I might add.

Mr. ALLEN. Thank you.

Admiral KENNER. The Coast Guard Reserve was authorized in 1941, and during World War II reached a maximum strength of 144,858. Following the cessation of hostilities the Reserve was demobilized and it was not until 1951 that funds were appropriated to conduct any type of paid training. Since that time appropriations have made possible some gain toward the goal of training sufficient officers and men required for mobilization. We are, however, at the present time, far short of this goal. As of January 1, 1955, the total strength of the Coast Guard Reserve was 3,142 officers and 15,913 enlisted men. Of that number, 1,247 officers and 5,234 enlisted personnel are participating in the training program.

At a time of mobilization, the Coast Guard will require a trained Reserve of 4,200 officers and 35,400 enlisted men. Therefore, today we have only 16.4 percent of our mobilization requirement undergoing training.

Our Organized Reserve is composed of two types of training units, one which trains for port security duties, and the other which trains for vessel manning. Training within these units consists of training individuals for their active duty assignments at a time of mobiliza-

tion. As of January 1, there were 76 port security units and 23 vessel manning units in commission. In addition to our own organized units, a small number of our Reserve personnel trains with Naval Air Reserve training units in the aviation field. If the proposed National Reserve plan now before the Congress is enacted into law, it will require an expansion in the number of Reserve personnel required to be in the training program by fiscal 1956, together with an increase in the number of training units. However, no changes are contemplated in the present methods utilized in the training program. Irrespective of the increase in the number of personnel undergoing training, the major mobilization requirements for trained personnel remain in the fields of port security, vessel manning, and aviation

The Coast Guard Auxiliary: In the late 1930's, yachtsmen concerned over the rising incidence of small-boat mishaps, expressed a desire to affiliate with the Coast Guard to prevent boating accidents, and to encourage better compliance with the laws applicable to small craft. This led to the establishment of the Coast Guard Reserve by congressional action of June 23, 1939, the Coast Guard Reserve Act of 1939. Although called a Reserve, the organization was voluntary, nonmilitary, and consisted of motorboat owners who had demonstrated a knowledge of boating subjects and a willingness to assist the Coast Guard.

Uniforms, insignia, flags and pennants were authorized for use by members. Prior to World War II, the Reserve was primarily useful in setting good examples on the water and assisting in patrol of marine parades and regattas.

On July 1, 1940, the auxiliary had 2,654 members, and 2,370 boats formed into 129 groups throughout the country. By revision of the original act of February 19, 1941, the Congress authorized a new Coast Guard Reserve, fully military in character, and renamed the original Reserve of the Coast Guard Auxiliary. During World War II, the auxiliary suspended its normal activities due to the absence of civilian boating and assisted the Coast Guard as civilian activities related to the war effort.

At the end of the war, there were 44,963 members. But as less than one-third were boatowners and many had joined for patriotic reasons unrelated to the organizations original mission, reorientation toward activities in the pleasure-boat field was difficult and slow, and much pruning of membership lists was necessary.

As a result, the membership, on July 1, 1948, declined to 13,000 members, with about 40 percent being actually boatowners. In recent years, progress has been made to broaden the scope of activities contributing to small-boat safety, to establish national standards and procedures for administration and performance, to strengthen auxiliary organization in general and to increase the percentage of boatowners.

In 1947, the courtesy motorboat examination program was established, and in 1953 a standard public instruction course was promulgated for use throughout the country and new and distinctive uniform insignia were adopted.

Mission: Briefly stated, the mission of the Coast Guard Auxiliary is to assist the Coast Guard in the promotion of small-boat safety. This is performed in many ways, the most important being outlined below:

A. Members conduct classes in boating for the benefit of the general public, distribute safety literature at boat shows, sponsor showings of safety film, and disseminate helpful boating information at waterfront areas.

Members make no-penalty courtesy examination of motorboats to promote compliance of the Motorboat Act; maintain their own boats to high standards set by the Coast Guard and cooperate with the Federal Communications Commission by checking marine radio installations and advising owners of the latest FCC regulations; members and facilities assist the Coast Guard in the operational field by patrolling regattas and participating in emergency search and rescue and hurricane work. Members qualify themselves for the many activities by pursuing courses of study established by the Coast Guard and furnish good examples in boating circles by demonstrating good boating procedures.

During 1954, members checked 25,245 motorboats and 2,374 marine radio installations; enrolled 6,949 students in public instruction courses; showed safety films to 12,386 persons, and trained 1,381 auxiliarists for membership. Members and facilities patrolled 297 regattas, assisted 2,535 boats in distress, and saved 116 lives.

The strength of the auxiliary on March 1, 1955, stands at 12,485 members. Enrolled as auxiliary facilities are 6,570 boats, 306 aircraft, 191 amateur radio stations. These members and facilities are organized into 418 flotillas throughout the United States and in Puerto Rico and the Hawaiian Islands.

That concludes the statement, gentlemen.

Mr. ALLEN. Mr. Chairman, may I ask a question?

Mr. ROBESON. Mr. Allen?

Mr. ALLEN. Do you think there is a need or desirability to have some kind of a motorboat operator's license comparable to a driver's license ashore?

Admiral KENNER. Well, I think personally it would be desirable, but I would prefer to request your permission to leave that question for the Commandant or Admiral Shepheard to answer.

Admiral SHEPHEARD. I can answer it very categorically and say yes.

Mr. ALLEN. Do you think it is so desirable that someone ought to introduce a bill?

Admiral SHEPHEARD. I don't know what the position would be of our organization. I know that I would personally be in favor of it.

Mr. ALLEN. The other question I wanted to ask was who authorizes the flag for the Coast Guard Auxiliary?

Admiral KENNER. Who authorized it?

Mr. ALLEN. Who designed and authorized the flag?

Admiral RICHMOND. The flags that they fly on the boats?

Mr. ALLEN. Yes.

Admiral RICHMOND. They were authorized under the basic law, under regulations set up under the basic law. The design goes back to the original regulations. I happen to have worked on the original regulations, although I had nothing to do with the particular design.

Mr. ALLEN. The point I am driving at is that there is a law passed by Congress which authorizes an official flag, is that correct?

Admiral RICHMOND. That is right. As I recall, and I don't have my copy here, as I recall, it says a suitable insignia or flag, or something like that.

Mr. ALLEN. Thank you.

Mr. MILLER. Mr. Chairman, do not the States license small boats and pleasure craft? California does, I believe.

Mr. ALLEN. I do not know whether they license them.

Mr. MILLER. They tax them and license them. If I am not mistaken, there is a provision in the California code for certain safety regulations that they must comply with.

Is that right, Admiral, that some of the States have laws in that regard?

Admiral SHEPHEARD. Yes; there are in several States. It leads to a bit of confusion as well, because since the beginning, Congress has endeavored to place all of the laws and regulations under Federal control. However, the States, on occasion, do get into the picture, and in fields that at times have already been preempted by the Government.

Mr. MILLER. Of course, the definition in those fields is pretty broad. There is an overlapping in all fields between the States and the Federal Government, almost. There is no fine line that the Government goes this far and then the States take over in the matter of food inspection, sanitation, or anything else. It even goes on down to lower levels where you have overlapping authority on a municipal basis. But as I remember it, the States do enforce, or some of the States do enforce, and sometimes pretty vigorously, some of the laws relative to the operation of small craft.

Admiral RICHMOND. I think the answer is, sir, that unfortunately not enough States do. Of course, you have a problem, Mr. Miller, in the matter of waters that are common to one or more States. There, of course, the Federal regulations are undoubtedly required. As a matter of fact, one of the biggest problems that the Coast Guard right now has is this: The creation of these big power dams and flood-control dams; we are creating in the interior of the United States large bodies of water which are, in fact, navigable waters, if you use the Appalachian decision, and it is one of the growing problems with the Coast Guard as to how far we are going to be required to go in, both to control the navigation on these bodies of water and regulate. We would prefer, because it is a big job, as much as possible to have the States act, if it falls within their purview.

Of course, TVA is the outstanding one. Then there is Lake Texoma. I could name a number of them. There is Shasta Lake, out in California.

Mr. MILLER. Some of these other lakes on the Tennessee, perhaps, are common to two States. Shasta is entirely within the State of California. Then the question arises in my mind, "Well, this is the Coast Guard. It has a historic mission, and it has lived up to traditions established through hundreds of years. But it is hard for me to conceive that the Coast Guard is going to have some authority in the length of the water set up behind Gunnison Dam or something else." It is entirely within the State. It could be 3,000 miles removed from the nearest approach to the coast, where no coastal facilities take place.

Do you think that you have a proper right, or that it is within the Coast Guard's jurisdiction to go into these interior man-made lakes?

Admiral RICHMOND. Yes, sir; I think we do very definitely. Sometimes I wish we didn't. The difficulty is that it all goes back to a

legal interpretation of what is a navigable water of the United States. The unfortunate part of the situation today is that you have the Federal Power Commission approving dams for power purposes and you have the Army engineers going in for flood control. For them to carry out their work you get an interpretation that these are navigable waters of the United States. The Coast Guard is charged with the responsibility for inspection and aids to navigation on navigable waters of the United States.

Furthermore, if you try to get a legal decision on it, they always fall back on the Appalachian case. If you will remember the line, the really controlling line, on that is that any water is a navigable water if it is in fact navigable or can be made so. The great difficulty is that you can take that broad definition and there is hardly a body of water that could not be made into a navigable body if you wanted to do it. We have tried to avoid that decision, but unfortunately what happens is this: A body of water will be created. Then we will go along and there will be no control, or the State has not acted, and then a casualty takes place. Then the question arises of why hasn't the Coast Guard moved in? Then the question is put to the Commandant of; isn't this navigable water?

And under the decisions that have been rendered, we have to decide that it is a navigable water.

Mr. MILLER. These decisions, and I am not familiar with all of them, are vague. Under the California Code, we define navigable streams, and pressure has always been put on to have the streams declared navigable because if it is navigable water it is open to the public fishing. A fisherman may wade up the stream and as long as he keeps his boots covered with water is not trespassing on the adjacent owners' land.

The determining factor in many cases of what is navigable there revolves itself around the question of whether or not it is a good fishing stream.

We used to have a law that a navigable water was one in which a log 6 inches in diameter could be floated. That was in the days when they were floating logs downstream. So what happens: You could cut a log, a 6-inch log, three-quarters of an inch long, and float it in that stream, and it becomes a navigable stream. Is that not correct? Those become historic decisions. Would it be desirable, or has any thought ever been given to perhaps defining a navigable stream in terms of actual navigation as we know it today?

Admiral RICHMOND. Well, Mr. Miller, in answer to that, that could be done by Congress and, as a matter of fact, we have suggested two things: One is either an interagency, interdepartmental group to determine those waters that are navigable under Federal jurisdiction. I think you and I are on the same side of the fence in this, sir. I think the finest thing in the world would be if Congress would say these bodies are Federal navigable waters and all the rest are outside of that, and fall within the jurisdiction of the States.

Mr. MILLER. Or to define by legislation what we mean by navigable, instead of leaving it up to numerous court decisions that have been rendered all over the country, influenced by different things, as to what is navigable, so that no one can determine today that this is a navigable stream. I had in mind, while you were talking about these dams, suppose we take 2 or 3 that could be named in any part of

the country. I have in mind the Boca Dam, and the waters behind it, in California, that ran into, originally, the Truckee River, and then into Pyramid Lake, and then barged out over one of the sinks there and never go to sea at all. Would we say that those are navigable waters? Someplace or another they sunk into the desert, even historically, yet at their headwaters they were very large. The Truckee River, from the great Lake Tahoe, that never gets to the sea.

Admiral RICHMOND. I do not know that particular one.

Mr. MILLER. It is the one that comes out of Lake Tahoe, comes on down and runs through Reno. It got most of its publicity by the fact that ladies who went to Reno in the early days to divest themselves of husbands, theoretically as they left the courthouse and crossed a little bridge were supposed to take off their wedding rings and throw them into the Truckee River. The boys that used to search the Truckee River found that there were no gold wedding rings in it however.

But it comes out and runs north for a while, and then turns and runs on down through Reno and out into the desert.

Admiral RICHMOND. It is a very large problem, I will say that, sir, and it is one that is a continual problem. I have a file on my desk now and I would say it is at least 12 pages, a mimeographed list of bodies of water for determination as to whether they are navigable.

Mr. MILLER. The absence of a firm definition of a navigable stream has caused you a lot of grief and worry in the past, has it?

Admiral RICHMOND. It is causing a certain amount of grief and worry right now. It is getting worse all the time, sir.

Mr. MILLER. That is something we could tackle some day.

Mr. ALLEN. I just want to make this observation. While there should be a definition of what is navigable, and possibly what is under State and what is under Federal jurisdiction, I trust that you are not forgetting that they pick these boats up at the Shasta Dam and trailer them over to Lake Tahoe, and pretty soon they are in Nevada. The same vessel that is subject to inspection is at one time in a Federal area, at another time in private waters, and at another time within another State.

Admiral RICHMOND. We are inspecting them on Lake Tahoe now, sir. We do not maintain personnel there, but we do send inspectors up, and also utilize this auxiliary to help maintain safety standards.

Mr. ROBESON. Any other questions?

If not, thank you for the testimony.

Mr. TUMULTY. I would like to ask one question, Mr. Chairman.

I have not been here, but I have always intended to ask this question of the Coast Guard. You have a Coast Guard station at Monmouth Beach, N. J., and there are beaches there where bathing goes on. Many days during the summer the fishing boats from Long Island and from New Jersey, too, come down and there is always a great deal of complaining on the part of bathers. I have been there when they have come in very close. Complaints have been made and they have been repeated in the newspapers, and they become rather multitudinous at times, as to who can see to it that those vessels do not come in to endanger the lives of people who are swimming. Some blame it on the Coast Guard and some blame it on the State. The State takes the position it is your responsibility. I was wondering who would have the duty of seeing to it that those fishing vessels do not come in so close to shore, when people are bathing in great num-

bers, so as to jeopardize their safety. Would that be within your province?

Admiral RICHMOND. I have not heard too much about fishing vessels, because usually they are working off further out. The great problem comes from motorboats, speed boats, all of which, if they are operating recklessly, are in violation.

Mr. TUMULTY. They are fishing vessels. I have seen them.

Admiral RICHMOND. Are we talking about commercial fishing vessels?

Mr. TUMULTY. One guy tried to hook me, practically. He thought he had one of the largest fish he had ever seen. They come in not all the time, but at certain times. Usually I would say it is in the latter part of July or the early part of August. They come in in vast numbers. The mothers are on the beach screaming.

Admiral RICHMOND. They are sport fishermen as distinguished from a commercial fishermen?

Mr. TUMULTY. They are boats; they are boats for people who hire them and get on them. They are not the ones that go out and tend the nets or anything like that, no.

Admiral RICHMOND. If they come under the Motorboat Act, by the type of boat, and they are operating recklessly—if they are just anchored and fishing, that is something else—if they are operating recklessly it is the Coast Guard job to step in and apprehend them.

Mr. TUMULTY. They are not operating recklessly, but their mere presence is so close to shore, with fishing tackle and hooks, in tremendous numbers. It is not just one or two. I was a member of the legislature at the time, and the State officials say, "What are you going to do about it?" They say, "It is the Coast Guard's fault," and the Coast Guard says, "No, it is the State's fault." As I say, I cursed them roundly a couple of times. I thought I was hooked. It really is dangerous. It will happen again this summer. I hope to come back from Washington with, if not an explanation, at least a better alibi. If a complaint were made to you, because there is a hazard there, there is no doubt about that, because of their large numbers, what would happen? To whom would that complaint be made?

Admiral RICHMOND. The best thing would be if there is a local Coast Guard.

Mr. TUMULTY. They are right there.

Admiral RICHMOND. Well, to the commanding officer's station, because in the prosecution of the case, finding the man, we must, of course, establish the facts. Our man on the spot is the best man to establish the facts. And, in turn, the person who is violating the law——

Mr. TUMULTY. The complaint would be made and he would then ascertain the identity of these ships?

Admiral RICHMOND. And the facts.

Mr. TUMULTY. He has no power, however, to warn them to push out, does he, to tell them to move back? It is a simple problem. All he has to do is say, "Get out a half mile," and that would be the end of it. No one seems to have the power to do it.

Admiral RICHMOND. You get into the question, then, of decision, as to whether this person is endangering lives. He has no right to prohibit those people being there. Those are open waters.

Mr. TUMULTY. But where children are swimming and people are in large numbers?

Admiral RICHMOND. It may be very poor judgment.

Mr. TUMULTY. It is not as if it were one ship, but it is a vast number that come from all around there, and they follow the fish right up, as I say, to the point where you can reach up and take a can of beer off the boat while swimming. That is how intermingled you are. Would there be any way by which that matter could be brought to the attention of the Coast Guard so they might observe it to see whether what I have to say is true or not?

Admiral RICHMOND. I will call it to the attention of the commander of the Third District and see if there is anything we can do.

Mr. TUMULTY. It may be because of this necessity for ascertaining facts, he may wish to warn them away. That has been going on for years. People get worried because of the danger of the tackle and everything else intermingled with people swimming. The Newark News has carried articles on it for a number of occasions. The State says it does not have boats to do anything, and that it is up to the Coast Guard, and the Coast Guard says it is not within their jurisdiction.

Mr. ROBESON. You might find out if anybody has been hooked yet.

Mr. TUMULTY. If they have, they have not said anything about it. But it will happen. Something will happen.

Mr. ROBESON. Any further questions? If not, thank you.

Who is your next witness?

Admiral RICHMOND. The next witness is Admiral Cowart, Chief of the Office of Engineering.

STATEMENT OF REAR ADM. KENNETH K. COWART, ENGINEER IN CHIEF, UNITED STATES COAST GUARD

Admiral COWART. My name is K. K. Cowart, Engineer in Chief of the Coast Guard. I understand that you have seen some movies and some charts from other officers who appeared prior to this. I have a series of charts that I would like to show you which will bring us a little closer to some of our facilities and equipment, and some of our problems. I am not up here to ask anything of you, but I would like to use these charts to present the information, if agreeable to you.

We are organized in Coast Guard engineering—engineering is my business and that is what I will be talking about—in five divisions, and between those divisions we have responsibility for the design, construction, repair, and maintenance of all Coast Guard equipment, whether it is on shore, on ships, or on our airplanes.

I think to give you some idea of how these various divisions operate, we will talk about them separately. The first one I have in mind is our civil engineering division. Actually, the connotation of the word is not very descriptive of the division, but that is what we call it. They have responsibility for all of our shore structures, including buoys. This first chart is intended only to show the range of their operation. Here is latitude 80, in Greenland, and then to the left is Borneo, and the Equator, and then from Puerto Rico to the northwest to the western Aleutians. That is the range of operation. The extremes we run into in weather, temperature, humidity, wind velocity, soil conditions, and so forth, demand a high order of knowledge, experience, and capability on the part of our civil engineers.

We have in the Coast Guard, and this is not typical of all of them, quite a few stations that might be referred to as kind of well-preserved antiques. This picture shows a station in Chesapeake Bay, built 70 years ago, with 3 men who live there and who keep the light, foghorn, and bell in operation. It is a pretty nice looking station, but I wish to call attention to the sanitary facility, which is this little part of the building here [indicating]. The water supply is caught off on the roof, with a drain downpipe inside. As I say, that is not typical of all of them. But in the first district, which is New England, we still have about 40 stations up there which have outside toilet facilities. We have some problems, of course. These buildings do not lend themselves to keeping our young men who come into the Coast Guard nowadays very happy or inclined to making the Coast Guard a career, if they are on one of these stations.

The next chart was drawn to show the general situation, overall, of our shore structures. On the left is our beginning, in 1790. The percentages along the chart are for each 10 years, up to the present time, and they show the number of buildings that were actually built in those years. You will notice we still have 0.6 percent which were built back in the beginning. The orange sections cover buildings that are overage, that is, 45 to 50 years old. During the last war, we built about 19 percent of our total structures of wartime type of construction, with about a 10-year life, so they are overage, too. That is why this particular bar is orange. That bar, added to the rest of the orange bars, adds up to 58 percent of our total shore structures being overage. The remainder in green, 42 percent, are still within their normal service life, from 50 years down to the present time. Naturally, this chart suggests that some type of orderly replacement program is very much in order.

Several years ago, in fact it was 1947, the Congress asked that the Coast Guard be studied. I think they used the word "studied" rather than investigated. We had a group called Ebasco Services make the study. They are a commercial engineering group who make studies of commercial organizations, or whatever, and determine how well they are doing their business, and so forth. Their report was dated January 1, 1948. This is more or less a proposal of how we might proceed with an orderly replacement program, based on that report.

Of the shore structures, referring to that report, the figures of which were gathered during 1947, at the present time we have a plant value of about $350 million. To replace that, it is estimated that the replacement cost would run about $540 million at the present time. In order to be at all reasonable about a replacement program of this kind, it should, of course, extend over a period of some years. But if we take the overage plant at 58 percent, its value comes out to $313 million, and the rest of it comes out to $227 million. If we consider the last figure and consider a 50-year life, you would get $4½ million for that portion, $4½ million per year for a replacement program.

Considering a reasonable approach to the overage portion of our shore plant, we feel it would naturally be spread over some time, and we think 25 years should be a reasonable time—25 years would mean 4 percent per year and it would work out to about $12,500,000. Adding that to the original you would come out with about $17 million per year as what we would desire.

That is not what we get, but that is what we think is reasonable and desirable as a replacement program in the Coast Guard. Actually, we are getting about $1 million a year, and so as it is pointed out here it will take us about 540 years at this rate.

I am going to leave shore structure now and pass to the floating units, the ships. I am not going to take a long time to give you the statistics, but we have gathered together a lot of information on one chart, covering 190 vessels.

The first figure shows the length of the vessel. The first are the 95-foot vessels. Then the number that we have in the service is shown, next showing the tonnage, and the next the age of the vessel. We have some of these 95-foot vessels that are only 1 year old and we are still building some.

Then there are the 255-foot vessels, with the number 13 being in service. The normal time for replacement of these is about 30 years. A lighter constructed vessel will have to be replaced at an earlier time. This chart covers all of our vessels of 95-foot and larger, and there are about 190 of these. There, is shown the replacement value. Some of these figures are rather large but they are borne out by actual experience. Also shown is the cost of one of these vessels today.

The last column shows the service of the vessels. SAR is search and rescue.

Mr. MILLER. What do you use the big one for, the 339-foot WAK?

Admiral COWART. There is only one vessel there of that type, and that is a vessel the name of which is the *Kukui*. She is a normal cargo or commercial vessel. She is used in the Pacific, in the construction of loran stations and various logistic purposes.

Mr. MILLER. She is not a regular cutter?

Admiral COWART. That is right. If you saw her, there would be nothing to identify her as a Coast Guard vessel in your mind. In fact, I may have a picture of her here in the next few charts.

I have some pictures to show typical vessels. This picture at the top is a 311-foot vessel and the one on the lower right hand is a 95-foot vessel. This one in the lower righthand corner is 1-year old. On the lower left hand is an icebreaker, the *East Wind*, and it is a rather large vessel, used for breaking ice. Probably some of you noticed the 95-foot model that is present here. That is a model of the 95-footer. While talking about that, the next model is a 40-foot model, and the last one is *Ambrose* lightship which you see as you come into New York Harbor. We have a number of models of various types in our headquarters, but some of them are much bigger than these. We did not bring up the larger models due to handling problems.

The next chart shows smaller vessels. At the top is a harbor tug, the *Chinook*, in the fifth or Norfolk district, I believe. In the lower left hand is a buoy tender, the *Sassafras*, a 180-foot vessel, and in the lower right-hand corner is the *Ambrose*. On the next chart at the top is a motor lifeboat, the type used at our Coast Guard lifeboat stations along the coast. They are self-righting. If they were capsized they would come back to their normal position. They are built so that the engine and equipment can stand up under very rough conditions. In the lower left-hand corner is a 40-foot boat, the same as the model over here. We built quite a number of those at our Coast Guard yard. I will speak of that a little later. In the lower right-hand corner is a buoyboat. This one is rather small size. It is about 50 feet in length. They handle the smaller buoys in the smaller chanels.

Speaking of our Coast Guard yard, which is our one industrial facility of any size, located near Baltimore, Md., this chart picture shows the overall view from the air. You can see the industrial area, and the temporary wartime buildings which have been practically all removed now. There are about 65 acres here, and we employ at the present time about 1,220 civilians called wage-board people, 210 classified civilians and about 124 military. We have other views here of the yard and some of the operations going on there.

The next chart is a view of the yard, or a portion of the yard, at the time we were building these 40-footers. We built quite a few of those. We had a regular production line for building them. When we were in the midst of it, we were turning out one boat a day. Our original estimates on the cost of one of these was about $53,000. We got into a mass production problem. These components that you see in the lower part of the picture being various components of the boat, and then here you can see the outlines of the boat. One boat was coming off the line a day. Due to the mass-production method that we adopted, we came out much better than we anticipated, and these boats were finally built at considerably less cost than estimated, in fact, about 15 percent less than was originally estimated.

The next is a picture of fairly recent operations over there when they were building this 95-footer. You can see the sections of the 95-footer, and one of the sections being hoisted over the ways. If you were in the yard, that is the method you would see. These are steel-hulled boats and welding is used throughout.

One of the things that we have been giving attention to, and I think the Navy started talking about this before we did, and going back to a picture of the old lighthouse I showed you awhile ago, is the habitability of ships. Here is a tender still in operation, the *Arbutus*. Here you see the sleeping quarters of the men, with 3 bunks, 1 above the other, with the mess table shown. The men eat and sleep in the same quarters. The center picture is an improved situation, being aboard a lightship built in 1950. At the top is a picture not regarded as ideal for the Coast Guard. It is ideal for merchant ships and this is what they are putting on the merchant ships. This is not for the officers but for the men. Neither the Navy nor the Coast Guard expects to come to anything like that. But we are giving it more attention

The next chart shows the Coast Guard buoy tender the *Hickory*, and here again you see the mess table and the spaces where the men sleep are in the same compartment. Next is the icebreaker *East Wind* where the mess tables are separate from the sleeping quarters. The next picture is a scene you might find in one of the late Mariner ships.

Going back to something on cost, maintenance being one of our big problems, we have found that the cost of maintaining ships has gone up very rapidly. These figures come from our actual accounts that have been kept on the same basis during this period, so that they can be compared. Prior to that time, our accounting was on a somewhat different basis so we will not go back further. The thing that we are trying to show here applies to a small 83-foot wooden boat. These are average figures for all of them. We have quite a number of those, around 60, in operation. They are now 12 years old. If you take the figures on the cost of maintenance on all of them, you can see how it runs through the different years. You might wonder how we get these cost jumps. It happens that as of that time, the whole class

of them had to be altered to meet some new requirement. When you add up all the factors, you find that this is the average or the trend of the cost of maintenance over this period of time. There are several factors which enter into that. The cost of labor and materials has gone up materially in this period of time. If we go back about 10 years earlier, the cost of labor and material now is about 2½ times what it was in 1939, by actual figures. If we take a larger vessel, 1 327-foot vessel, the largest vessel that the Coast Guard has, we do not find much difference in the picture. The cost of maintenance has the same factors, and the age of the vessel has something to do with it, and also the complexity of our vessels is entering the picture, because the vessels have a lot more equipment on them in order to meet present-day requirements. So there are four items, labor, material, age, and complexity, that enter the picture of why the curve goes up. You will notice that the curve is very much the same in the two cases, even though the first is a wooden boat of much smaller size.

On the next chart, as in the case of shore units, we obviously have a need for orderly replacement programs here. Recalling that first chart on vessels, the replacement costs are high. This chart shows all the vessels that the Coast Guard has at the present time and when they were built. Some of them go back to 1900. You will notice that there are some vessels that are over 50 years old, some lightships. This is the actual distribution in tonnage by years. Of course, you find that most of our tonnage was built during the last war. To replace these vessels with an orderly replacement program would be something which should proceed by years, as we indicated earlier, and we are basing it a 30-year life, which is about the actual experience.

Here you can see the distribution that we come out with. That, represented in dollars, would let you come out for the first 12 years at an average of about $35 million, and for the next 18 years it averages about $13 million, as the present cost of replacement of the ships in the Coast Guard, based on an average 30-year life.

Those are 2 divisions that we have talked about, 1 the shore units, and the other the floating units. We have another division called Electronics. Electronics takes care of all of our electronic equipment on shore units, on ships, and airplanes. We have indicated here the extent of these operations. We have a plant value of about $79 million in electronics. It is divided up with $27 million of it being in shore units and communication, about $7 million in aircraft, $25 million on vessels, about $12,500,000 on loran stations, and so on with smaller equipment being listed.

In the distribution of the funds, and I believe this is fiscal 1953 shown here, under this particular division they had about $8,300,000. $2,300,000 went into maintenance, about $4 million went into replacement equipment, and about $2 million for growth. Electronics is a division where the picture moves faster than others. The average life of electronics equipment runs from 10 to 15 years, so the turnover is much more rapid.

For personnel to do this, we have 126 civilians, 71 warrant officers, 1,000 enlisted men, and 45 trained electronics officers.

The next chart is intended to bring out something of what has been going on in this field. We picked 3 years—1938, 1943, and 1955. The boxes show those particular years.

The number of different electronic equipment aboard one of our major cutters in 1938 was about 10. In 1943, it jumped up to about 18, and in 1955, on the same ship, it is up to about 68. Something of the complexity of any electronic equipment is indicated by the number of tubes which it contains. We come over to the right side of the chart, for the corresponding years, and we find in 1938 there were something like 100 tubes aboard the ship. In 1943, we were up to about 300; in 1955, we were up to 1,500 tubes. And so it goes for the rest of the items shown, at loran stations, at shore communications stations, and for the aircraft. You will note how the growth has been through these periods in all cases.

Next are a couple of photographs to show something of what was just depicted on the previous chart. I must say that this is not 1 vessel in the lower picture, but 2 vessels tied side by side, similar types. At the top is a wartime vessel, a 325-foot vessel. You will notice how clean she is of antennas. What is pictured there applies only about 10 or 15 years ago. The lower one is a later picture showing the increase of electronic equipment aboard ship.

I mentioned another division of the Coast Guard engineering is aviation or aeronautical engineering. That division takes care of our airplanes.

This next chart shows the growth of aviation in the Coast Guard. About 1925 was the time the first planes came into use in the Coast Guard, and for about 5 years it was an experimental venture, with very few planes. Beginning in 1930, planes began to be used in Coast Guard operations. Of course, as you come to the war years, the trend shows planes entering more and more into Coast Guard operations. These figures include both planes, fixed wing aircraft, as well as helicopters. Helicopters are becoming more important.

The next chart brings out something of how costs are changing in connection with planes. In the top portion we show the average plane weight. As we approached the war years, it became desirable to have long-range craft for purposes that were involved at that time. While it has leveled off somewhat following the war, it still remains high. That is, the average weight of our aircraft has gone up very materially.

In the lower chart, we have the cost of aircraft, per pound, with the variations as we come to the war years, when it went up pretty sharply. Then, due to controls, it leveled off and even dropped a bit. But since 1950 you can see how steeply this curve has risen. If you take the two things together, the cost per pound and with the pounds going up, planes are very expensive, as we all know.

The last chart might be looked upon as something of a summary of some of the ideas mentioned in the various fields of the Coast Guard. At the top left is an 83-foot boat, of wooden construction, and on the top right is the steel 95-foot boat, replacing the 83-foot for operation. We still have a number of 83-foot boats in operation. It has a crusing range of about 250 miles. What we are looking for now is 2,000 miles. The 95-footer will do it. The 83 will do 15 knots, and the 95 will make 20 knots. The 83 uses visual search, and the 95 has radar and loran. The 83 has been modified, since being first built. In communications, the 83 is limited to 200 miles, and the 95 will reach 1,500 miles. The cost of the 83 is $100,000 compared to $520,000 in the 95.

In the lower part you will see a comparison of 1938 with 1955. In talking costs over with the Navy, we found their experiences the same as ours. We went back to 1939 and regarded that as a starting point. Since 1939 up to the present, 1955, the cost of labor and materials, the portion shown, bears out what I brought out earlier, that the cost of labor and material today is about two and a half times what it was in 1939.

Another factor which has entered in here which does increase cost is what we call performance complexity, that is, all of this new equipment for meeting the new operational requirements. You get increase in costs due to that. At the present time you can see about where the Coast Guard plant is, with our plant at about 1.3 billion, and coming up to about 1.4 billion. We have reason to believe that if you look ahead 25 years it is going to continue. The demands are higher and the performance complexities are increased. This is conjecture as to what we may be facing in 1975.

I think that is all I have, gentlemen.

Mr. CASEY. Admiral, on these shore facilities, you laid out a program there for the replacement of these overage buildings. Have you presented that program to the Appropriations Committee each year?

Admiral RICHMOND. In part. Of course the Appropriations Committee is fully familiar with our problem. I would like to make that point clear. They are familiar from what we have presented them with, and also our subcommittee, both under Mr. Gary and under Mr. Canfield, has traveled extensively with the Coast Guard. I think the Subcommittee on Appropriations is about as familiar with any Coast Guard problems as any subcommittee.

Our problem, of course, is always that of matching our requirements to the ceiling provisions which all Government agencies work under now in presenting a budget. Of course, as the committee realizes, our requests must be tied to the program of the President which is part of the overall budgetary considerations.

Mr. CASEY. Are not your buildings on the whole older than some of the other buildings, at least, in the comparable services?

Admiral RICHMOND. I would say Yes, "at least as old."

Mr. CASEY. Do you see any hope of success in accomplishing some replacement program other than the 540-year program?

Admiral RICHMOND. Sir, we are always hopeful. I will put it that way. We have made some progress. It has not been as much as we would have hoped for. For example, as I indicated earlier, and I will use aviation because it is much easier to talk in terms of that because the span of your equipment is shorter, and much easier to visualize the problem, in 1948 we started a replacement program. That replacement program has not kept abreast of our requirements. I have to confess that. In the last 2 years we have slipped back a little bit on it. That is compounding in that, as I indicated to the committee the other day, to meet the immediate problem, for 1957, 1958, 1959, we will have to go higher, request more for those 3 years, to bring our fleet up to the replacement point that we would like.

Mr. CASEY. Thank you.

Admiral COWART. If I may, I omitted reference to one division. I have some smaller size charts. We have a fifth division called Testing and Development. It is a small division and will not take long.

The purpose of it is indicated by its name. They make tests and develop things which are of interest and use to the Coast Guard. We do no pure research as such.

I have an illustration of some of their work that would be of interest that I might refer to. The first is a buoy, a can buoy, just being hauled out of the water, showing the marine growth on the buoy.

The second picture shows a larger buoy, but in all fairness this one was not in service when it was pulled out. It had been sunk for some time, but that is a buoy underneath the growth.

The Testing and Development Division some 3 years ago thought we should improve the painting of buoys and see if we could get away from some of the problems. When they are hauled up, this type of thing presents quite a problem.

We went into a new painting system called vinyl painting which we find quite effective. This white portion is snow. The next picture shows buoys which have been in the water for 2 years. I don't mean that they all come out this way.

Mr. BOYKIN. What kind of paint is it, Admiral?

Admiral COWART. It is a vinyl base paint, and coming into quite general use. The Navy is using it, too.

In this buoy system, I think we were a little ahead of the Navy for developing the specification. But it is a Federal specification available today.

Mr. BOYKIN. We have a number of problems with our piling on the wharves. Would it do any good on wood, do you think?

Admiral COWART. I don't think this particular paint has been designed for wood. We have some experiments in process with it on wood boats. I don't have any data with me today, but I have it in connection with one of our steel craft.

This next picture is the Coast Guard training ship at the Academy, the *Eagle*. She had been in the water for some time and was drydocked. This clean hull may be something that you are not used to looking at, but you are glad to see a hull as clean as that when you come out before anything is done to it.

The next picture shows something of the effect of this system. Here you see a part of the hull of the same ship. Here are the keel blocks, used when the vessel is drydocked. You can notice the two areas where the keel blocks were at the previous docking and we could not paint in those areas. You will notice how the growth picked up in those two areas, and it shows up in both places.

Mr. BOYKIN. It is kind of like fumigating, or whatever they call it, in the wood where termites cannot get in. Maybe the wood has something like that in it.

Admiral COWART. I don't think it is as simple as that. It is really a separate base. The common method prior to this had been to chip the buoys with a hammer, put on red lead, and then the final coat of paint on the red lead. This method involves a sand blasting, then a wash primer, and several coats of this new paint. As far as looks go, it has very much the same looks, but it lasts much longer.

The fact that we have buoys that could remain in the water for 2 years without the necessity of bringing them out brought out other problems. One was that we had to go out and change the lamps in the buoy. We have now a lamp changer that will bring up a new lamp if the lamp burns out. Four lamps are carried and this is not

enough, so we had to develop a new lamp changer. In other words we want to have the two things, the need for painting and the need for new lamps, come up in a 2-year period of time.

One of the other developments is shown in the next picture. That is a matter of radar reflection of buoys. Practically all modern ships have radar now, and you like to pick up the buoy on your radar. The farther you can pick it up the better. Here is an old-style buoy, the type built for years. We altered that buoy to make it a radar reflector buoy and still do the same job it has always done but be a much better radar reflector.

The next picture shows the new buoy, with cross plates. That makes the buoy about 50 percent more effective as a radar reflector. You can pick it up at about a 50 percent greater distance. The same thing for the canbuoy. The next picture shows how they looked.

We have not changed them all yet, but we are in the process of getting around to putting cross plates on them.

The next picture shows the lighted buoys, where we have done the same thing. Here is a picture of one of our tenders at sea taking in a large buoy. This is an older style buoy. I call attention to the lamp here. The new lamp is not in place. This is the construction of the buoy which you have ordinarily seen for years at sea. We are replacing that buoy with a buoy such as shown in the next photograph. It performs the same function, but the lamp would go in the cross section, but the lamp is not now in place.

It increases its effectiveness for radar use by about 50 percent.

I show those as illustrations of the type of things which the Testing and Development Division interests itself in. That is all I have.

Mr. ROBESON. We appreciate your statement, Admiral.

Mr. RAY. Admiral, how long has the Coast Guard had the shipyard?

Admiral COWART. The Coast Guard yard in Baltimore started out as a boat-building shop. It was not a shipyard until just during the last war years, that is, to build ships. But during the war it was expanded and we built ships there 255 feet in length, and we have ways for that purpose.

Mr. RAY. Do you build all of your own ships?

Admiral COWART. No, sir. We build our small boats. We still build most of our small boats.

Mr. RAY. What proportion would you say of your construction is in your own yard and what amount is in private yards?

Admiral COWART. Well, for boats of the size of lightships, and these 95 footers, and on down, we have built by far the greater proportion there. But larger ships, we have built the greater proportion elsewhere. We have built no larger ships for a long time.

Mr. RAY. Does that mean you have to bring ships a long distance for repair work?

Admiral COWART. Only on the east coast. We don't bring our ships from the west coast to the yard. In fact, we don't bring those from the Gulf of Mexico around.

Mr. RAY. In your planned replacement program, have you planned a substantial part of that for private yards? Does it follow just the same line as you talked about here?

Admiral COWART. If the construction were in the small-boat field, like these 40-footers, we had a program there which I referred to in

the pictures. We did that all at our yard. But if we had a large program, we would go to outside advertising.

Mr. RAY. You do not plan to enlarge this yard?

Admiral COWART. No, sir. We have no plans in that direction. What we would like to do is to try to remain at about a steady level, so that we don't have fluctuations in manpower there.

Mr. RAY. Thank you.

The CHAIRMAN. Any further questions?

Mr. PELLY. You showed pictures, Admiral, of floating buoys. I believe some of those buoys have foghorns that work by atmospheric pressures.

One near where I live goes off on an apparently beautiful sunny afternoon. How are those controlled? It is very annoying, sometimes.

Admiral COWART. It is 24 hours a day, because the sound depends on the motion of the sea waters.

Mr. PELLY. It is not atmosphere?

Admiral COWART. No. There is no moving mechanism there. It depends on the motion or movement of the sea. If it is perfectly calm, it will be quiet. But at other times, the noise comes through.

The CHAIRMAN. Any other questions? Mr. Allen?

Mr. ALLEN. Admiral, do you have any instances in which you have done work on your various ships in your yards that would give you a comparison of your prices with the commercial prices?

Admiral COWART. Yes, sir. I don't believe I recall any that were matters of comparison between these costs, but we have particularly considered the cost of our yard work as compared to commercial practice. We find a rather considerable variation. It is not a uniform thing at all. It is a thing that we have to take some average on to come up with a figure that means very much.

In a survey that we ran on that within the last year for the benefit of some of our people within the Treasury Department, we found instances in which the yard made a better showing than commercial practice, and other instances in which the reverse was true. But all in all, we were not too far apart.

Mr. ALLEN. Do you have similar studies with regard to the acquisition of small boats, such as the 40-foot and 50-foot boats?

Admiral COWART. Actually, we have not built any 40-footers commercially. The whole program was handled at our yard. So I wouldn't have anything to base an actual experience on there.

One of the reasons why we have this yard for building our own boats is that we found such wide variations in commercial practice that are unacceptable to the Coast Guard for the type of service that we have to perform.

We don't mean that they are all bad and that they can't build good boats, but we have had some very poor experiences. In those instances, where we have had to build boats and had to go outside, the demand was far greater than we could build ourselves and we have wound up with some poor experience.

Mr. ALLEN. I presume your boats have to be stronger than the boats that are commercially acceptable.

Admiral COWART. Yes, sir.

Mr. ALLEN. Thank you.

The CHAIRMAN. Any further questions?

If not, this concludes the hearing with the Coast Guard, does it, Admiral?

Admiral RICHMOND. Yes sir; Mr. Chairman.

If you will bear with me for 5 minutes, I had an experience last night which I would like to recount to the committee because I think it emphasizes a question that was asked the other day about the use of loran.

I attended a dinner last night in Philadelphia, with the Maritime Society, and since this was an unprompted statement I give it to you as such.

I think it indicates the very desirable use of loran.

A gentleman came over to me and said he wanted me to meet the executive vice president of the Sun Oil Co., who was telling him about his experiences on a trip that he had made on one of their latest tankers from the bay area, the Delaware Bay area, to the Corpus Christi area. He mentioned that, on the trip down, which he had taken just more or less for recreation, he had spent a good deal of time with their new loran receiver, and he was very high in his praise of it.

He indicated that during the entire time, they were able to maintain their position, continuing position, thereby avoiding getting off their course 4 or 5 miles with subsequent rectifying courses to bring them back. In fact they had even passed some of their own tankers several miles off course and had directed them back on their course.

Summing it all up, as I say, he was very high in his praise of loran. I believe he said only four of their fleet had loran. The question was asked the other day if all commercial vessels had loran. He said that only four of his fleet has loran, but presently they are going to put it aboard all of them. You probably wonder what I am driving at, and that is this: I asked him how long the trip was, and he said 4½ days. I asked him if he would tell me or estimate what loran saved him in time, and he said:

> I would estimate that we saved at least 3½ hours by knowing our position all the time, plus the fact that in bad weather we did not have to slow down, we knew our position, and with loran we could run full speed. We saved a minimum of 3½ hours on that trip.

That is 3½ hours steaming time. It means dollars and cents from an operator's standpoint. I think that while today there are not as many merchant vessels carrying loran as we would like, I think we can indicate that, as they see the value of it, they will put it aboard. He indicated that, as far as he was concerned, all Sun Oil tankers would have loran shortly.

The other thing I wanted to mention, gentlemen, if you are interested, is that I have with me some copies of the Armed Forces magazine which, for their January issue, was devoted entirely to the Coast Guard. This is not a Coast Guard publication. It does, however, give a quick résumé of the Coast Guard. I would be very happy to distribute it to the members of the committee if they would like.

Aside from that, sir, I want to thank the committee for listening to us so attentively. I appreciate the opportunity on the part of the Coast Guard, my officers and myself, for having the chance to be here. I feel, of course, with so many diversified interests, and with rather a large field to cover, we may not have covered all of the items that you,

as individuals, might have been interested in, and we may have gone into too much detail in some that you did not have such great interest in. It is rather difficult to prepare a thing of this nature and know just exactly what emphasis to put on the various matters.

But I want to extend to the committee an invitation to call on me or call on any member of the staff at any time that you want any additional information. We will be only too happy to give it to you individually or collectively.

I do wish to extend the invitation to each and all of you, if practicable, to visit Coast Guard units and see how we operate. That is the best way. We can sit here a long time and talk, but if you can see it you will have a much better idea.

Thank you very much, sir.

The CHAIRMAN. Admiral, in behalf of the committee, I want to say that you and your staff have fulfilled the purpose of the hearings exceedingly well. As you know, the purpose of a hearing is to familiarize the members of the committee with the activity of the Coast Guard and give them an opportunity to see the men who operate the Coast Guard. I want to take the opportunity, personally, to pay you a high compliment. I believe your supervision and administration of the Coast Guard is excellent, and that your staff is composed of men who have conducted themselves well here, and who have presented the various features of the Coast Guard in a most understandable manner.

Admiral RICHMOND. Thank you very much.

The CHAIRMAN. Are there other comments that members of the committee would like to make?

Mr. BOYKIN. We agree with our chairman, and I am sure all of us would like to have copies of the publication you referred to.

Mr. TOLLEFSON. In behalf of everybody on this side, Mr. Chairman, and I suppose all of us, for that matter, we concur in everything that you have said. We all regarded the Coast Guard very highly and we are pleased with the presentation that has been made. I have said this before, but one of the nicest things that happened since I have been on the committee has been this series of hearings, in which we have been able to learn from those people who are best qualified to speak of the operations and activities of various departments.

We appreciate your coming up here very much.

The CHAIRMAN. Thank you. Now, the committee will go into executive session.

(Whereupon, at 11:47 a. m., the public session was concluded, subject to the call of the Chair.)

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